|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 1. CircRNA profiles in Qu muscle of young, aging and aging with aerobic exercise.** | | | | | | | |
| **ID** | **Chromosome** | **GeneName** | **Young** | **Aging** | **Aging+Exercise** | **Genomic Length** | **Seq Length** |
| chr1\_118419918\_118419440\_+478-Clasp1 | chr1 | Clasp1 | 0 | 0 | 0.180646022 | 479 | 479 |
| chr1\_125579327\_125568547\_+10780-Slc35f5 | chr1 | Slc35f5 | 0.608389058 | 0 | 1.445168179 | 10781 | 571 |
| chr1\_127799553\_127791605\_+7948-Ccnt2 | chr1 | Ccnt2 | 0 | 0.546927538 | 0.180646022 | 7949 | 463 |
| chr1\_128223641\_128193460\_+30181-R3hdm1 | chr1 | R3hdm1 | 0.202796353 | 0.182309179 | 0 | 30182 | 1005 |
| chr1\_133753749\_133753089\_-660-Atp2b4 | chr1 | Atp2b4 | 0.405592706 | 0 | 0 | 661 | 661 |
| chr1\_139062971\_139040000\_+22971-Dennd1b | chr1 | Dennd1b | 1.41957447 | 0.546927538 | 1.445168179 | 22972 | 546 |
| chr1\_139062971\_139053346\_+9625-Dennd1b | chr1 | Dennd1b | 0.811185411 | 0.729236718 | 0.361292045 | 9626 | 376 |
| chr1\_151478625\_151476140\_-2485-Rnf2 | chr1 | Rnf2 | 1.013981764 | 0 | 0.180646022 | 2486 | 466 |
| chr1\_155197435\_155173986\_+23449-Stx6 | chr1 | Stx6 | 0.405592706 | 0.729236718 | 0 | 23450 | 656 |
| chr1\_157299264\_157286731\_-12533-Rasal2 | chr1 | Rasal2 | 0 | 0 | 0.180646022 | 12534 | 252 |
| chr1\_16509408\_16440323\_-69085-Stau2 | chr1 | Stau2 | 0 | 0.182309179 | 0 | 69086 | 648 |
| chr1\_165608604\_165604610\_-3994-Mpzl1 | chr1 | Mpzl1 | 0.202796353 | 0 | 0 | 3995 | 514 |
| chr1\_167237648\_167234692\_-2956-Uck2 | chr1 | Uck2 | 0 | 0.182309179 | 0.180646022 | 2957 | 400 |
| chr1\_181832232\_181825622\_-6610-Lbr | chr1 | Lbr | 0.811185411 | 0 | 0.722584089 | 6611 | 529 |
| chr1\_181961919\_181923560\_-38359-Enah | chr1 | Enah | 0.202796353 | 0 | 0 | 38360 | 779 |
| chr1\_185397267\_185386246\_+11021-Eprs | chr1 | Eprs | 0.405592706 | 0.182309179 | 0.361292045 | 11022 | 622 |
| chr1\_189798681\_189786636\_+12045-Ptpn14 | chr1 | Ptpn14 | 0 | 0.182309179 | 0.722584089 | 12046 | 483 |
| chr1\_191763671\_191749540\_+14131-Lpgat1 | chr1 | Lpgat1 | 0 | 0.364618359 | 0 | 14132 | 616 |
| chr1\_38085652\_38053616\_-32036-Rev1 | chr1 | Rev1 | 0 | 0 | 0.180646022 | 32037 | 3208 |
| chr1\_53282092\_53256629\_-25463-Pms1 | chr1 | Pms1 | 1.216778117 | 0.911545897 | 1.806460223 | 25464 | 602 |
| chr1\_53914632\_53904249\_-10383-Hecw2 | chr1 | Hecw2 | 0.202796353 | 0 | 0 | 10384 | 566 |
| chr1\_55702133\_55695745\_+6388-Plcl1 | chr1 | Plcl1 | 0 | 0 | 0.180646022 | 6389 | 2679 |
| chr1\_64576329\_64550849\_+25480-Creb1 | chr1 | Creb1 | 0 | 0.182309179 | 0 | 25481 | 960 |
| chr1\_75196669\_75194841\_+1828-Ankzf1 | chr1 | Ankzf1 | 0.608389058 | 0 | 0.180646022 | 1829 | 1286 |
| chr1\_87380008\_87364104\_+15904-Gigyf2 | chr1 | Gigyf2 | 8.111854113 | 3.828492767 | 5.41938067 | 15905 | 494 |
| chr1\_87881939\_87880368\_+1571-Dgkd | chr1 | Dgkd | 0 | 0.364618359 | 0 | 1572 | 192 |
| chr1\_89634294\_89627761\_+6533-Agap1 | chr1 | Agap1 | 0.405592706 | 0 | 0 | 6534 | 363 |
| chr1\_89671271\_89663661\_+7610-Agap1 | chr1 | Agap1 | 0.405592706 | 0 | 0 | 7611 | 377 |
| chr1\_91385346\_91384565\_-781-Ilkap | chr1 | Ilkap | 0 | 0.182309179 | 0 | 782 | 201 |
| chr1\_92148494\_92141520\_-6974-Hdac4 | chr1 | Hdac4 | 0.202796353 | 1.093855076 | 0 | 6975 | 301 |
| chr1\_92148494\_92148256\_-238-Hdac4 | chr1 | Hdac4 | 0.202796353 | 0 | 0 | 239 | 239 |
| chr10\_123181800\_123146794\_-35006-Usp15 | chr10 | Usp15 | 0 | 0 | 0.361292045 | 35007 | 826 |
| chr10\_12455564\_12436281\_-19283-Utrn | chr10 | Utrn | 0.608389058 | 0 | 0 | 19284 | 725 |
| chr10\_12455564\_12439627\_-15937-Utrn | chr10 | Utrn | 0.405592706 | 0 | 0.180646022 | 15938 | 613 |
| chr10\_18094908\_18092845\_+2063-Reps1 | chr10 | Reps1 | 0.405592706 | 0 | 0 | 2064 | 703 |
| chr10\_18096336\_18089448\_+6888-Reps1 | chr10 | Reps1 | 0 | 0.546927538 | 0 | 6889 | 982 |
| chr10\_22712091\_22705693\_-6398-Tbpl1 | chr10 | Tbpl1 | 0.202796353 | 0.546927538 | 0 | 6399 | 2039 |
| chr10\_25289730\_25267308\_-22422-Akap7 | chr10 | Akap7 | 0.202796353 | 0 | 0.180646022 | 22423 | 579 |
| chr10\_40469955\_40466638\_+3317-Cdk19 | chr10 | Cdk19 | 0 | 0.729236718 | 0 | 3318 | 346 |
| chr10\_43395692\_43393871\_+1821-Pdss2 | chr10 | Pdss2 | 0.405592706 | 0 | 0 | 1822 | 306 |
| chr10\_43413547\_43393871\_+19676-Pdss2 | chr10 | Pdss2 | 0.506990882 | 0.455772948 | 0 | 19677 | 339 |
| chr10\_52436663\_52429193\_+7470-Nus1 | chr10 | Nus1 | 0 | 0.182309179 | 0 | 7471 | 463 |
| chr10\_68751328\_68748376\_+2952-Tmem26 | chr10 | Tmem26 | 0 | 0.364618359 | 0 | 2953 | 335 |
| chr10\_75279961\_75274017\_+5944-Specc1l | chr10 | Specc1l | 1.013981764 | 0.729236718 | 0.361292045 | 5945 | 344 |
| chr10\_75700095\_75684292\_-15803-Cabin1 | chr10 | Cabin1 | 0.202796353 | 0 | 0 | 15804 | 629 |
| chr11\_103055289\_103046379\_+8910-Nmt1 | chr11 | Nmt1 | 0.202796353 | 0.182309179 | 0.903230112 | 8911 | 356 |
| chr11\_107620214\_107613851\_+6363-Helz | chr11 | Helz | 0.202796353 | 0 | 0 | 6364 | 733 |
| chr11\_107649340\_107592706\_+56634-Helz | chr11 | Helz | 0.405592706 | 0.364618359 | 0 | 56635 | 2938 |
| chr11\_109977873\_109971685\_-6188-Abca8b | chr11 | Abca8b | 0 | 0.364618359 | 0 | 6189 | 976 |
| chr11\_116263297\_116262860\_-437-Srp68 | chr11 | Srp68 | 0.405592706 | 0 | 0.541938067 | 438 | 193 |
| chr11\_20727639\_20703711\_-23928-Aftph | chr11 | Aftph | 0.202796353 | 0 | 0 | 23929 | 2414 |
| chr11\_22068506\_22053432\_-15074-Ehbp1 | chr11 | Ehbp1 | 0 | 0.546927538 | 0.541938067 | 15075 | 751 |
| chr11\_3645523\_3641211\_-4312-Tug1 | chr11 | Tug1 | 0 | 0.182309179 | 0 | 4313 | 4313 |
| chr11\_43705477\_43704534\_+943-Pwwp2a | chr11 | Pwwp2a | 3.853130704 | 1.823091794 | 3.432274424 | 944 | 944 |
| chr11\_60275002\_60258856\_-16146-Tom1l2 | chr11 | Tom1l2 | 0.202796353 | 0.364618359 | 0 | 16147 | 640 |
| chr11\_60275002\_60270318\_-4684-Tom1l2 | chr11 | Tom1l2 | 0 | 0.09115459 | 0.090323011 | 4685 | 229 |
| chr11\_6193476\_6193154\_-322-Nudcd3 | chr11 | Nudcd3 | 0 | 0.182309179 | 0 | 323 | 323 |
| chr11\_62161910\_62146306\_+15604-Specc1 | chr11 | Specc1 | 0.202796353 | 0 | 0 | 15605 | 586 |
| chr11\_6317080\_6311009\_+6071-Ogdh | chr11 | Ogdh | 0 | 0.182309179 | 0.180646022 | 6072 | 6072 |
| chr11\_6317080\_6313788\_+3292-Ogdh | chr11 | Ogdh | 0.811185411 | 0.364618359 | 0.903230112 | 3293 | 295 |
| chr11\_69651723\_69649728\_+1995-Fxr2 | chr11 | Fxr2 | 0 | 0 | 0.180646022 | 1996 | 825 |
| chr11\_74990215\_74928993\_+61222-Smg6 | chr11 | Smg6 | 0 | 0.182309179 | 0 | 61223 | 2778 |
| chr11\_75391227\_75390072\_+1155-Smyd4 | chr11 | Smyd4 | 1.622370823 | 1.640782614 | 1.264522156 | 1156 | 1156 |
| chr11\_78009794\_78006727\_+3067-Phf12 | chr11 | Phf12 | 0 | 0.182309179 | 0 | 3068 | 467 |
| chr11\_84195687\_84193079\_+2608-Acaca | chr11 | Acaca | 0 | 0 | 0.541938067 | 2609 | 297 |
| chr11\_8479665\_8478225\_-1440-Tns3 | chr11 | Tns3 | 0.202796353 | 0.182309179 | 0 | 1441 | 360 |
| chr11\_85104026\_85077265\_-26761-Usp32 | chr11 | Usp32 | 0.202796353 | 0 | 0 | 26762 | 513 |
| chr11\_90594841\_90571722\_-23119-Stxbp4 | chr11 | Stxbp4 | 0 | 0.182309179 | 0 | 23120 | 345 |
| chr11\_93912458\_93905159\_+7299-Mbtd1 | chr11 | Mbtd1 | 0 | 0 | 0.361292045 | 7300 | 547 |
| chr12\_111618383\_111592577\_+25806-Mark3 | chr12 | Mark3 | 0.811185411 | 0.364618359 | 0 | 25807 | 361 |
| chr12\_116324210\_116317830\_+6380-Esyt2 | chr12 | Esyt2 | 1.622370823 | 1.823091794 | 2.167752268 | 6381 | 840 |
| chr12\_3648389\_3617606\_+30783-Dtnb | chr12 | Dtnb | 1.216778117 | 0.364618359 | 1.083876134 | 30784 | 514 |
| chr12\_3648389\_3632810\_+15579-Dtnb | chr12 | Dtnb | 0 | 0 | 0.361292045 | 15580 | 428 |
| chr12\_40640445\_40631522\_+8923-Dock4 | chr12 | Dock4 | 0.811185411 | 0.182309179 | 0 | 8924 | 331 |
| chr12\_5006791\_4961218\_+45573-Atad2b | chr12 | Atad2b | 0.202796353 | 0 | 0.180646022 | 45574 | 1224 |
| chr12\_51661713\_51647994\_-13719-Strn3 | chr12 | Strn3 | 0.608389058 | 2.552328511 | 2.34839829 | 13720 | 703 |
| chr12\_51772705\_51772274\_-431-Hectd1 | chr12 | Hectd1 | 0.202796353 | 0.182309179 | 0.361292045 | 432 | 344 |
| chr12\_52519967\_52516079\_+3888-Arhgap5 | chr12 | Arhgap5 | 0.202796353 | 0.182309179 | 0.361292045 | 3889 | 3889 |
| chr12\_53142768\_53139381\_+3387-Akap6 | chr12 | Akap6 | 0 | 1.093855076 | 1.083876134 | 3388 | 3388 |
| chr12\_69303962\_69302324\_+1638-Klhdc2 | chr12 | Klhdc2 | 0.608389058 | 0.364618359 | 0 | 1639 | 316 |
| chr12\_81316104\_81314260\_-1844-Slc8a3 | chr12 | Slc8a3 | 0.811185411 | 0.546927538 | 0.722584089 | 1845 | 1845 |
| chr12\_85034034\_85028770\_+5264-Ylpm1 | chr12 | Ylpm1 | 0.608389058 | 0.729236718 | 1.625814201 | 5265 | 2236 |
| chr12\_98518832\_98489905\_-28927-Kcnk10 | chr12 | Kcnk10 | 0 | 0 | 0.180646022 | 28928 | 614 |
| chr13\_103889285\_103884143\_-5142-Erbb2ip | chr13 | Erbb2ip | 0.202796353 | 0 | 0 | 5143 | 364 |
| chr13\_104052639\_104046189\_-6450-Nln | chr13 | Nln | 0.202796353 | 0 | 0 | 6451 | 749 |
| chr13\_17772957\_17738917\_-34040-Cdk13 | chr13 | Cdk13 | 1.013981764 | 0.729236718 | 0.180646022 | 34041 | 1566 |
| chr13\_17772957\_17750257\_-22700-Cdk13 | chr13 | Cdk13 | 0.811185411 | 1.458473435 | 0.541938067 | 22701 | 1386 |
| chr13\_17772957\_17763104\_-9853-Cdk13 | chr13 | Cdk13 | 0.811185411 | 0.911545897 | 0.541938067 | 9854 | 1139 |
| chr13\_18814293\_18810432\_+3861-Vps41 | chr13 | Vps41 | 0 | 0.546927538 | 0 | 3862 | 334 |
| chr13\_18830793\_18810432\_+20361-Vps41 | chr13 | Vps41 | 0 | 0 | 0.180646022 | 20362 | 735 |
| chr13\_28669994\_28668370\_-1624-2610307P16Rik | chr13 | 2610307P16Rik | 0.811185411 | 0 | 0 | 1625 | 548 |
| chr13\_35816575\_35815909\_+666-Cdyl | chr13 | Cdyl | 0.202796353 | 0.182309179 | 0 | 667 | 667 |
| chr13\_37899787\_37888871\_+10916-Rreb1 | chr13 | Rreb1 | 0.811185411 | 0.546927538 | 0.180646022 | 10917 | 1890 |
| chr13\_43425214\_43419576\_-5638-Ranbp9 | chr13 | Ranbp9 | 0 | 0 | 0.361292045 | 5639 | 598 |
| chr13\_44903258\_44902226\_+1032-Jarid2 | chr13 | Jarid2 | 0.202796353 | 0.182309179 | 0 | 1033 | 1033 |
| chr13\_48606360\_48590287\_-16073-Ptpdc1 | chr13 | Ptpdc1 | 0 | 0 | 0.180646022 | 16074 | 643 |
| chr13\_55248077\_55233895\_+14182-Nsd1 | chr13 | Nsd1 | 3.853130704 | 1.276164256 | 1.625814201 | 14183 | 2869 |
| chr13\_63068285\_63061035\_+7250-2010111I01Rik | chr13 | 2010111I01Rik | 0 | 0.182309179 | 0.180646022 | 7251 | 406 |
| chr13\_64248466\_64243634\_-4832-Cdc14b | chr13 | Cdc14b | 0.101398176 | 0 | 0 | 4833 | 322 |
| chr13\_64248499\_64243634\_-4865-Cdc14b | chr13 | Cdc14b | 0 | 0 | 0.541938067 | 4866 | 355 |
| chr13\_91564694\_91524585\_+40109-Ssbp2 | chr13 | Ssbp2 | 0.202796353 | 0 | 0 | 40110 | 220 |
| chr13\_93356079\_93341756\_+14323-Homer1 | chr13 | Homer1 | 0.405592706 | 0 | 0 | 14324 | 522 |
| chr13\_97150413\_97141927\_+8486-Gfm2 | chr13 | Gfm2 | 0 | 0.182309179 | 0.180646022 | 8487 | 540 |
| chr13\_9735466\_9720773\_-14693-Zmynd11 | chr13 | Zmynd11 | 0 | 0.729236718 | 0 | 14694 | 295 |
| chr14\_13951263\_13950132\_-1131-Thoc7 | chr14 | Thoc7 | 0 | 0.364618359 | 0 | 1132 | 195 |
| chr14\_17963321\_17963061\_+260-Thrb | chr14 | Thrb | 0 | 0 | 0.541938067 | 261 | 261 |
| chr14\_24192954\_24190318\_-2636-Dlg5 | chr14 | Dlg5 | 0 | 0 | 0.541938067 | 2637 | 491 |
| chr14\_25581673\_25502655\_+79018-Zmiz1 | chr14 | Zmiz1 | 0 | 0 | 0.180646022 | 79019 | 514 |
| chr14\_25581673\_25572020\_+9653-Zmiz1 | chr14 | Zmiz1 | 0 | 0 | 0.180646022 | 9654 | 329 |
| chr14\_32262831\_32250017\_+12814-Parg | chr14 | Parg | 0.405592706 | 0 | 0 | 12815 | 365 |
| chr14\_47016795\_47016277\_+518-Samd4 | chr14 | Samd4 | 3.853130704 | 1.823091794 | 0.722584089 | 519 | 519 |
| chr14\_48179276\_48168197\_+11079-Peli2 | chr14 | Peli2 | 0.405592706 | 0 | 0 | 11080 | 11080 |
| chr14\_54759745\_54758439\_-1306-Slc7a8 | chr14 | Slc7a8 | 0 | 0 | 0.180646022 | 1307 | 357 |
| chr14\_60875307\_60843208\_+32099-Mipep | chr14 | Mipep | 0.811185411 | 0 | 0 | 32100 | 391 |
| chr14\_70267506\_70235140\_-32366-Ppp3cc | chr14 | Ppp3cc | 0 | 0.182309179 | 0 | 32367 | 1089 |
| chr14\_87487287\_87472076\_+15211-Tdrd3 | chr14 | Tdrd3 | 0.811185411 | 0.546927538 | 0.903230112 | 15212 | 949 |
| chr15\_4059996\_4047465\_+12531-Oxct1 | chr15 | Oxct1 | 0.608389058 | 0.729236718 | 0.903230112 | 12532 | 454 |
| chr15\_44420873\_44388469\_-32404-Nudcd1 | chr15 | Nudcd1 | 0 | 0.182309179 | 0 | 32405 | 1181 |
| chr15\_50846942\_50846014\_-928-Trps1 | chr15 | Trps1 | 0 | 0.182309179 | 0.541938067 | 929 | 929 |
| chr15\_5170016\_5160603\_+9413-Prkaa1 | chr15 | Prkaa1 | 0 | 0.364618359 | 0 | 9414 | 2769 |
| chr15\_62107465\_62107148\_+317-Pvt1 | chr15 | Pvt1 | 0.202796353 | 0.911545897 | 0 | 318 | 318 |
| chr15\_68170223\_68165753\_-4470-Zfat | chr15 | Zfat | 0.202796353 | 0 | 0 | 4471 | 412 |
| chr15\_73031643\_73012806\_-18837-Trappc9 | chr15 | Trappc9 | 0 | 0 | 0.180646022 | 18838 | 465 |
| chr15\_79543856\_79541034\_-2822-Ddx17 | chr15 | Ddx17 | 0 | 0.182309179 | 0 | 2823 | 385 |
| chr15\_81392322\_81382980\_-9342-St13 | chr15 | St13 | 0 | 0 | 0.361292045 | 9343 | 269 |
| chr15\_82857284\_82825231\_-32053-Tcf20 | chr15 | Tcf20 | 1.216778117 | 0 | 0.722584089 | 32054 | 5866 |
| chr15\_82857284\_82851513\_-5771-Tcf20 | chr15 | Tcf20 | 4.461519762 | 5.651584561 | 5.238734648 | 5772 | 5772 |
| chr15\_85376702\_85359454\_+17248-Atxn10 | chr15 | Atxn10 | 0.202796353 | 0 | 0 | 17249 | 531 |
| chr15\_88812159\_88811297\_-862-Alg12 | chr15 | Alg12 | 0 | 0.364618359 | 0 | 863 | 328 |
| chr15\_91516494\_91497393\_-19101-Slc2a13 | chr15 | Slc2a13 | 0 | 0 | 0.361292045 | 19102 | 369 |
| chr15\_93465245\_93424014\_+41231-Pphln1 | chr15 | Pphln1 | 0 | 0.182309179 | 0 | 41232 | 672 |
| chr15\_98742829\_98740337\_-2492-Arf3 | chr15 | Arf3 | 0 | 0.182309179 | 0 | 2493 | 631 |
| chr16\_10644881\_10611003\_+33878-Clec16a | chr16 | Clec16a | 0.608389058 | 0.182309179 | 0.722584089 | 33879 | 813 |
| chr16\_11128703\_11104566\_-24137-Txndc11 | chr16 | Txndc11 | 0.202796353 | 0 | 0 | 24138 | 539 |
| chr16\_11128703\_11116795\_-11908-Txndc11 | chr16 | Txndc11 | 1.825167175 | 0.911545897 | 0.361292045 | 11909 | 445 |
| chr16\_13647299\_13629583\_-17716-Parn | chr16 | Parn | 0 | 0.09115459 | 0 | 17717 | 222 |
| chr16\_13699075\_13697333\_+1742-Bfar | chr16 | Bfar | 0 | 0 | 0.361292045 | 1743 | 377 |
| chr16\_17389457\_17373350\_-16107-Pi4ka | chr16 | Pi4ka | 0.202796353 | 0 | 0 | 16108 | 700 |
| chr16\_31812824\_31796866\_+15958-Dlg1 | chr16 | Dlg1 | 0.202796353 | 0 | 0 | 15959 | 423 |
| chr16\_32961744\_32950292\_+11452-Lrch3 | chr16 | Lrch3 | 2.230759881 | 0.364618359 | 0.903230112 | 11453 | 625 |
| chr16\_33434974\_33421321\_+13653-Zfp148 | chr16 | Zfp148 | 1.216778117 | 0.546927538 | 1.445168179 | 13654 | 567 |
| chr16\_43577748\_43569681\_+8067-Zbtb20 | chr16 | Zbtb20 | 0 | 0.911545897 | 0.361292045 | 8068 | 511 |
| chr16\_58433463\_58424561\_+8902-Dcbld2 | chr16 | Dcbld2 | 0 | 0 | 0.180646022 | 8903 | 366 |
| chr16\_76352549\_76330746\_-21803-Nrip1 | chr16 | Nrip1 | 0 | 0 | 0.361292045 | 21804 | 197 |
| chr17\_14375519\_14344327\_+31192-Smoc2 | chr17 | Smoc2 | 0 | 0.182309179 | 0.8129071 | 31193 | 477 |
| chr17\_30530365\_30513556\_-16809-Btbd9 | chr17 | Btbd9 | 0.202796353 | 0.729236718 | 0 | 16810 | 1181 |
| chr17\_50611195\_50606295\_+4900-Plcl2 | chr17 | Plcl2 | 0.608389058 | 0 | 0 | 4901 | 2691 |
| chr17\_6139156\_6137211\_+1945-Tulp4 | chr17 | Tulp4 | 27.78310034 | 21.51248317 | 28.54207153 | 1946 | 1946 |
| chr17\_63490887\_63471408\_-19479-Fbxl17 | chr17 | Fbxl17 | 0.811185411 | 0 | 0 | 19480 | 513 |
| chr17\_64625451\_64624528\_+923-Man2a1 | chr17 | Man2a1 | 0.405592706 | 0.364618359 | 0 | 924 | 397 |
| chr17\_64714712\_64710704\_+4008-Man2a1 | chr17 | Man2a1 | 0 | 0.182309179 | 0 | 4009 | 626 |
| chr17\_65595054\_65592291\_-2763-Vapa | chr17 | Vapa | 0.202796353 | 0 | 0 | 2764 | 338 |
| chr17\_78315746\_78313124\_+2622-Crim1 | chr17 | Crim1 | 0.405592706 | 0.911545897 | 0 | 2623 | 381 |
| chr17\_80460047\_80445430\_-14617-Sos1 | chr17 | Sos1 | 0 | 0 | 0.180646022 | 14618 | 987 |
| chr18\_23597558\_23583084\_+14474-Dtna | chr18 | Dtna | 0 | 0 | 0.180646022 | 14475 | 639 |
| chr18\_25344962\_25339714\_+5248-AW554918 | chr18 | AW554918 | 0 | 0.729236718 | 0.180646022 | 5249 | 770 |
| chr18\_31835481\_31827262\_+8219-Wdr33 | chr18 | Wdr33 | 0.101398176 | 0.364618359 | 0 | 8220 | 747 |
| chr18\_35154540\_35152601\_+1939-Ctnna1 | chr18 | Ctnna1 | 0 | 0.182309179 | 0 | 1940 | 303 |
| chr18\_39150118\_39120119\_+29999-Arhgap26 | chr18 | Arhgap26 | 0.202796353 | 0.729236718 | 0 | 30000 | 510 |
| chr18\_39246924\_39227368\_+19556-Arhgap26 | chr18 | Arhgap26 | 0 | 0.364618359 | 0 | 19557 | 394 |
| chr18\_53906669\_53895531\_+11138-Csnk1g3 | chr18 | Csnk1g3 | 0 | 0.729236718 | 0 | 11139 | 535 |
| chr18\_6115850\_6111685\_-4165-Arhgap12 | chr18 | Arhgap12 | 0 | 1.093855076 | 0 | 4166 | 792 |
| chr18\_6450639\_6448905\_-1734-Epc1 | chr18 | Epc1 | 0 | 0.364618359 | 0 | 1735 | 766 |
| chr18\_65656632\_65638750\_+17882-Zfp532 | chr18 | Zfp532 | 1.216778117 | 0.729236718 | 0.541938067 | 17883 | 1005 |
| chr18\_65656632\_65644193\_+12439-Zfp532 | chr18 | Zfp532 | 1.41957447 | 0.364618359 | 0 | 12440 | 823 |
| chr18\_65656632\_65651560\_+5072-Zfp532 | chr18 | Zfp532 | 2.230759881 | 3.646183588 | 3.07098238 | 5073 | 445 |
| chr18\_69564684\_69564034\_+650-Tcf4 | chr18 | Tcf4 | 0 | 0 | 0.361292045 | 651 | 180 |
| chr18\_73678039\_73675161\_-2878-Smad4 | chr18 | Smad4 | 0.202796353 | 0 | 0 | 2879 | 582 |
| chr18\_75063173\_75052981\_+10192-Dym | chr18 | Dym | 0 | 0.546927538 | 0.180646022 | 10193 | 354 |
| chr18\_75082507\_75080203\_+2304-Dym | chr18 | Dym | 0 | 0.364618359 | 0.541938067 | 2305 | 269 |
| chr18\_75126919\_75114790\_+12129-Dym | chr18 | Dym | 1.41957447 | 1.640782614 | 1.987106246 | 12130 | 697 |
| chr19\_17678557\_17642493\_-36064-Pcsk5 | chr19 | Pcsk5 | 0.202796353 | 0 | 0 | 36065 | 576 |
| chr19\_28531986\_28530873\_-1113-Glis3 | chr19 | Glis3 | 0.405592706 | 0 | 0.180646022 | 1114 | 1114 |
| chr19\_29755017\_29743533\_-11484-9930021J03Rik | chr19 | 9930021J03Rik | 0 | 0.182309179 | 0.180646022 | 11485 | 1544 |
| chr19\_37088587\_37044522\_-44065-Cpeb3 | chr19 | Cpeb3 | 0 | 0 | 0.361292045 | 44066 | 674 |
| chr19\_41555701\_41545875\_+9826-Lcor | chr19 | Lcor | 1.622370823 | 1.093855076 | 1.264522156 | 9827 | 515 |
| chr19\_45640521\_45630865\_-9656-Fbxw4 | chr19 | Fbxw4 | 1.013981764 | 1.458473435 | 0.180646022 | 9657 | 510 |
| chr19\_45640521\_45635735\_-4786-Fbxw4 | chr19 | Fbxw4 | 0.811185411 | 0.182309179 | 0 | 4787 | 415 |
| chr19\_45892148\_45885952\_-6196-9130011E15Rik | chr19 | 9130011E15Rik | 0.405592706 | 0 | 0 | 6197 | 286 |
| chr19\_4788042\_4784724\_-3318-Rbm4 | chr19 | Rbm4 | 0.202796353 | 0 | 0.090323011 | 3319 | 1526 |
| chr19\_4794009\_4784724\_-9285-Rbm4 | chr19 | Rbm4 | 0.304194529 | 0.273463769 | 0.903230112 | 9286 | 2143 |
| chr19\_4794009\_4787361\_-6648-Rbm4 | chr19 | Rbm4 | 1.41957447 | 1.093855076 | 1.806460223 | 6649 | 1299 |
| chr19\_53988383\_53987454\_+929-Shoc2 | chr19 | Shoc2 | 0 | 0.546927538 | 0.361292045 | 930 | 930 |
| chr19\_56576284\_56570416\_+5868-Nhlrc2 | chr19 | Nhlrc2 | 0 | 0 | 0.361292045 | 5869 | 708 |
| chr19\_57379175\_57378549\_+626-Fam160b1 | chr19 | Fam160b1 | 1.622370823 | 0.729236718 | 0.903230112 | 627 | 491 |
| chr19\_57777945\_57751630\_+26315-Atrnl1 | chr19 | Atrnl1 | 0 | 0.364618359 | 0 | 26316 | 394 |
| chr19\_57797503\_57751630\_+45873-Atrnl1 | chr19 | Atrnl1 | 0 | 0 | 0.180646022 | 45874 | 473 |
| chr2\_104471847\_104470749\_-1098-Hipk3 | chr2 | Hipk3 | 2.83914894 | 0.911545897 | 1.445168179 | 1099 | 1099 |
| chr2\_104609186\_104608871\_+315-Cstf3 | chr2 | Cstf3 | 0 | 0 | 0.180646022 | 316 | 316 |
| chr2\_120825315\_120806759\_-18556-Ttbk2 | chr2 | Ttbk2 | 0 | 0 | 0.180646022 | 18557 | 358 |
| chr2\_126799234\_126797467\_-1767-Trpm7 | chr2 | Trpm7 | 0 | 0 | 0.903230112 | 1768 | 433 |
| chr2\_129811237\_129810488\_+749-Stk35 | chr2 | Stk35 | 2.230759881 | 0.911545897 | 1.264522156 | 750 | 750 |
| chr2\_131516443\_131511984\_+4459-Smox | chr2 | Smox | 3.650334351 | 2.734637691 | 2.167752268 | 4460 | 480 |
| chr2\_140057499\_140042094\_-15405-Tasp1 | chr2 | Tasp1 | 0.202796353 | 0.364618359 | 0.180646022 | 15406 | 350 |
| chr2\_142740991\_142739523\_-1468-Kif16b | chr2 | Kif16b | 0.405592706 | 0.546927538 | 1.083876134 | 1469 | 172 |
| chr2\_143974609\_143963104\_-11505-Rrbp1 | chr2 | Rrbp1 | 0 | 0.182309179 | 0 | 11506 | 1042 |
| chr2\_152308431\_152302152\_+6279-Tbc1d20 | chr2 | Tbc1d20 | 0 | 0.182309179 | 0 | 6280 | 556 |
| chr2\_156178952\_156177633\_-1319-Rbm39 | chr2 | Rbm39 | 0.405592706 | 0.364618359 | 0.180646022 | 1320 | 1320 |
| chr2\_156749356\_156745835\_+3521-Dlgap4 | chr2 | Dlgap4 | 0.405592706 | 0 | 0.180646022 | 3522 | 1173 |
| chr2\_158058827\_158035996\_+22831-Rprd1b | chr2 | Rprd1b | 0.405592706 | 0.546927538 | 0 | 22832 | 680 |
| chr2\_168571633\_168567139\_-4494-Nfatc2 | chr2 | Nfatc2 | 1.41957447 | 0.729236718 | 0.903230112 | 4495 | 1208 |
| chr2\_169886586\_169883526\_+3060-Tshz2 | chr2 | Tshz2 | 0.202796353 | 0.182309179 | 0 | 3061 | 3061 |
| chr2\_18146872\_18101458\_+45414-Mllt10 | chr2 | Mllt10 | 0.202796353 | 0.729236718 | 0 | 45415 | 624 |
| chr2\_23545579\_23537328\_-8251-Spopl | chr2 | Spopl | 1.013981764 | 0.729236718 | 2.167752268 | 8252 | 869 |
| chr2\_24825067\_24813527\_-11540-Ehmt1 | chr2 | Ehmt1 | 0.405592706 | 0.182309179 | 0 | 11541 | 346 |
| chr2\_32183300\_32182458\_+842-Prrc2b | chr2 | Prrc2b | 0 | 0 | 0.361292045 | 843 | 347 |
| chr2\_33324703\_33260478\_-64225-Ralgps1 | chr2 | Ralgps1 | 0 | 0.273463769 | 0 | 64226 | 445 |
| chr2\_37983105\_37936619\_-46486-Dennd1a | chr2 | Dennd1a | 0 | 0.182309179 | 0 | 46487 | 274 |
| chr2\_44756435\_44752047\_-4388-Gtdc1 | chr2 | Gtdc1 | 0 | 0 | 0.180646022 | 4389 | 342 |
| chr2\_59772539\_59771132\_+1407-Tanc1 | chr2 | Tanc1 | 0.202796353 | 0 | 0 | 1408 | 372 |
| chr2\_59962630\_59948087\_-14543-Baz2b | chr2 | Baz2b | 0.202796353 | 0 | 0.180646022 | 14544 | 1276 |
| chr2\_6721613\_6721417\_-196-Celf2 | chr2 | Celf2 | 0 | 0.182309179 | 0 | 197 | 197 |
| chr2\_69922933\_69914414\_+8519-Ubr3 | chr2 | Ubr3 | 0 | 0.364618359 | 0 | 8520 | 493 |
| chr2\_70786995\_70768862\_-18133-Tlk1 | chr2 | Tlk1 | 0.202796353 | 0 | 0 | 18134 | 260 |
| chr2\_74573626\_74547838\_-25788-Lnp | chr2 | Lnp | 1.013981764 | 0.182309179 | 0.903230112 | 25789 | 555 |
| chr2\_91825352\_91805024\_+20328-Ambra1 | chr2 | Ambra1 | 0.405592706 | 0.364618359 | 0 | 20329 | 449 |
| chr2\_93013889\_93012627\_-1262-Prdm11 | chr2 | Prdm11 | 0.202796353 | 0 | 0 | 1263 | 492 |
| chr3\_106539603\_106531137\_-8466-Cept1 | chr3 | Cept1 | 1.216778117 | 1.458473435 | 0.722584089 | 8467 | 704 |
| chr3\_122748477\_122747889\_+588-Pde5a | chr3 | Pde5a | 0 | 0.182309179 | 0 | 589 | 589 |
| chr3\_133330512\_133320936\_+9576-Ppa2 | chr3 | Ppa2 | 0.202796353 | 0 | 0 | 9577 | 284 |
| chr3\_137906057\_137902187\_+3870-Dnajb14 | chr3 | Dnajb14 | 0 | 0 | 0.722584089 | 3871 | 564 |
| chr3\_152747773\_152738186\_+9587-Pigk | chr3 | Pigk | 0.405592706 | 0.182309179 | 0.180646022 | 9588 | 888 |
| chr3\_153411871\_153411462\_-409-St6galnac3 | chr3 | St6galnac3 | 0.202796353 | 0.364618359 | 0 | 410 | 410 |
| chr3\_32865966\_32861771\_+4195-Usp13 | chr3 | Usp13 | 0 | 0 | 0.180646022 | 4196 | 328 |
| chr3\_51326035\_51299783\_-26252-Elf2 | chr3 | Elf2 | 3.244741645 | 0.546927538 | 1.083876134 | 26253 | 587 |
| chr3\_51326035\_51308050\_-17985-Elf2 | chr3 | Elf2 | 9.531428583 | 6.198512099 | 5.780672715 | 17986 | 484 |
| chr3\_51857076\_51855499\_-1577-Maml3 | chr3 | Maml3 | 0.202796353 | 0.273463769 | 0 | 1578 | 1578 |
| chr3\_66996590\_66994517\_+2073-Rsrc1 | chr3 | Rsrc1 | 0 | 0.182309179 | 0.361292045 | 2074 | 322 |
| chr3\_88349444\_88346445\_+2999-Smg5 | chr3 | Smg5 | 0.811185411 | 0 | 0 | 3000 | 395 |
| chr3\_88985790\_88965812\_+19978-Ash1l | chr3 | Ash1l | 0.608389058 | 1.276164256 | 0.722584089 | 19979 | 5075 |
| chr3\_89007877\_89001773\_+6104-Ash1l | chr3 | Ash1l | 0 | 0 | 0.361292045 | 6105 | 838 |
| chr4\_108719812\_108717789\_-2023-Zfyve9 | chr4 | Zfyve9 | 1.825167175 | 0.546927538 | 1.083876134 | 2024 | 2024 |
| chr4\_108727545\_108717789\_-9756-Zfyve9 | chr4 | Zfyve9 | 0.202796353 | 0 | 0 | 9757 | 2220 |
| chr4\_109935698\_109883636\_+52062-Faf1 | chr4 | Faf1 | 0 | 0 | 0.541938067 | 52063 | 601 |
| chr4\_117593162\_117582600\_+10562-Eri3 | chr4 | Eri3 | 0 | 0.364618359 | 0.180646022 | 10563 | 1582 |
| chr4\_117615241\_117564621\_+50620-Eri3 | chr4 | Eri3 | 0.405592706 | 0 | 0 | 50621 | 804 |
| chr4\_117615241\_117582600\_+32641-Eri3 | chr4 | Eri3 | 0 | 0.182309179 | 0 | 32642 | 1655 |
| chr4\_121190258\_121170618\_-19640-Rlf | chr4 | Rlf | 0 | 0 | 0.180646022 | 19641 | 573 |
| chr4\_121190258\_121182606\_-7652-Rlf | chr4 | Rlf | 0.405592706 | 0.182309179 | 0.180646022 | 7653 | 370 |
| chr4\_132673032\_132656693\_+16339-Eya3 | chr4 | Eya3 | 0 | 0.182309179 | 0.270969033 | 16340 | 463 |
| chr4\_132707123\_132689705\_+17418-Eya3 | chr4 | Eya3 | 0.811185411 | 0 | 0.180646022 | 17419 | 801 |
| chr4\_133723051\_133719537\_-3514-Arid1a | chr4 | Arid1a | 1.013981764 | 0.729236718 | 0.722584089 | 3515 | 780 |
| chr4\_141494398\_141483725\_-10673-Spen | chr4 | Spen | 0.405592706 | 0.182309179 | 0.270969033 | 10674 | 969 |
| chr4\_145152798\_145148317\_-4481-Vps13d | chr4 | Vps13d | 0.811185411 | 1.093855076 | 1.445168179 | 4482 | 1184 |
| chr4\_151835883\_151830418\_-5465-Camta1 | chr4 | Camta1 | 0 | 0.273463769 | 0 | 5466 | 189 |
| chr4\_34839986\_34839332\_-654-Zfp292 | chr4 | Zfp292 | 0.608389058 | 0 | 0.722584089 | 655 | 370 |
| chr4\_48617331\_48604581\_+12750-Tmeff1 | chr4 | Tmeff1 | 0 | 0 | 0.180646022 | 12751 | 367 |
| chr4\_58885498\_58861525\_-23973-AI314180 | chr4 | AI314180 | 0.202796353 | 0.182309179 | 0.541938067 | 23974 | 1031 |
| chr4\_59691338\_59690144\_+1194-E130308A19Rik | chr4 | E130308A19Rik | 0 | 0.546927538 | 0.180646022 | 1195 | 1195 |
| chr4\_74315649\_74306965\_+8684-Kdm4c | chr4 | Kdm4c | 0 | 0.182309179 | 0.361292045 | 8685 | 292 |
| chr4\_82383661\_82350389\_-33272-Nfib | chr4 | Nfib | 0 | 0 | 0.180646022 | 33273 | 363 |
| chr4\_82854115\_82835446\_-18669-Zdhhc21 | chr4 | Zdhhc21 | 0 | 0.364618359 | 0.361292045 | 18670 | 694 |
| chr4\_84293662\_84291693\_-1969-Bnc2 | chr4 | Bnc2 | 0.608389058 | 1.823091794 | 1.625814201 | 1970 | 1970 |
| chr4\_85006524\_84971131\_+35393-Cntln | chr4 | Cntln | 0 | 0.182309179 | 0.180646022 | 35394 | 1016 |
| chr4\_87794011\_87782287\_-11724-Mllt3 | chr4 | Mllt3 | 0 | 0 | 0.361292045 | 11725 | 450 |
| chr4\_9610938\_9583812\_-27126-Asph | chr4 | Asph | 0.405592706 | 1.093855076 | 0 | 27127 | 576 |
| chr5\_100485855\_100475689\_-10166-Lin54 | chr5 | Lin54 | 0 | 0.364618359 | 0.180646022 | 10167 | 983 |
| chr5\_103501912\_103501367\_+545-Ptpn13 | chr5 | Ptpn13 | 0.202796353 | 0 | 0 | 546 | 546 |
| chr5\_103876289\_103862918\_-13371-Klhl8 | chr5 | Klhl8 | 0.608389058 | 0 | 0.361292045 | 13372 | 1797 |
| chr5\_104541262\_104538826\_+2436-D930016D06Rik | chr5 | D930016D06Rik | 0 | 1.093855076 | 0 | 2437 | 245 |
| chr5\_105911508\_105891118\_+20390-Zfp326 | chr5 | Zfp326 | 0.405592706 | 0 | 0 | 20391 | 786 |
| chr5\_106619642\_106618071\_-1571-Zfp644 | chr5 | Zfp644 | 0 | 0.182309179 | 0 | 1572 | 461 |
| chr5\_106638635\_106618071\_-20564-Zfp644 | chr5 | Zfp644 | 4.055927057 | 7.110057996 | 7.045194871 | 20565 | 4213 |
| chr5\_106638635\_106634831\_-3804-Zfp644 | chr5 | Zfp644 | 2.83914894 | 4.557729485 | 4.877442603 | 3805 | 3632 |
| chr5\_106666845\_106618071\_-48774-Zfp644 | chr5 | Zfp644 | 0 | 0.911545897 | 0.541938067 | 48775 | 4274 |
| chr5\_106666845\_106634831\_-32014-Zfp644 | chr5 | Zfp644 | 0 | 1.276164256 | 0.8129071 | 32015 | 3693 |
| chr5\_107799260\_107788199\_-11061-Evi5 | chr5 | Evi5 | 0 | 0.729236718 | 0 | 11062 | 678 |
| chr5\_110756766\_110753804\_-2962-Ep400 | chr5 | Ep400 | 0 | 0.364618359 | 0 | 2963 | 1481 |
| chr5\_110756766\_110755397\_-1369-Ep400 | chr5 | Ep400 | 4.055927057 | 1.823091794 | 1.625814201 | 1370 | 1370 |
| chr5\_111183431\_111182924\_+507-Ttc28 | chr5 | Ttc28 | 0 | 0.182309179 | 0 | 508 | 508 |
| chr5\_118095729\_118092496\_-3233-Fbxw8 | chr5 | Fbxw8 | 0.202796353 | 0 | 0 | 3234 | 404 |
| chr5\_118593570\_118593333\_+237-Med13l | chr5 | Med13l | 0.608389058 | 0.911545897 | 0 | 238 | 238 |
| chr5\_121273799\_121263885\_+9914-Gm15800 | chr5 | Gm15800 | 0 | 0 | 0.361292045 | 9915 | 503 |
| chr5\_123104511\_123099837\_+4674-Tmem120b | chr5 | Tmem120b | 0 | 0.182309179 | 0 | 4675 | 363 |
| chr5\_123745589\_123744955\_-634-Rsrc2 | chr5 | Rsrc2 | 0 | 0.182309179 | 0 | 635 | 250 |
| chr5\_130191043\_130187401\_+3642-Rabgef1 | chr5 | Rabgef1 | 0.608389058 | 0 | 0.180646022 | 3643 | 353 |
| chr5\_130198116\_130187401\_+10715-Rabgef1 | chr5 | Rabgef1 | 0.405592706 | 0.729236718 | 0.180646022 | 10716 | 523 |
| chr5\_134500149\_134491893\_-8256-Clip2 | chr5 | Clip2 | 0.202796353 | 0 | 0 | 8257 | 708 |
| chr5\_136340137\_136332624\_-7513-Cux1 | chr5 | Cux1 | 0 | 0 | 0.090323011 | 7514 | 154 |
| chr5\_147455188\_147450653\_+4535-Pan3 | chr5 | Pan3 | 0.202796353 | 0 | 0 | 4536 | 260 |
| chr5\_148921412\_148918596\_-2816-Katnal1 | chr5 | Katnal1 | 0.202796353 | 0 | 0 | 2817 | 337 |
| chr5\_16333825\_16299929\_+33896-Cacna2d1 | chr5 | Cacna2d1 | 0 | 0 | 0.180646022 | 33897 | 1014 |
| chr5\_23565265\_23540375\_-24890-Srpk2 | chr5 | Srpk2 | 0.202796353 | 0 | 0 | 24891 | 544 |
| chr5\_28368313\_28358274\_+10039-Rbm33 | chr5 | Rbm33 | 0.202796353 | 0 | 0 | 10040 | 557 |
| chr5\_32491189\_32478066\_+13123-Ppp1cb | chr5 | Ppp1cb | 0.202796353 | 0.182309179 | 0 | 13124 | 1063 |
| chr5\_32664400\_32640331\_+24069-Yes1 | chr5 | Yes1 | 0 | 0.546927538 | 0.361292045 | 24070 | 1425 |
| chr5\_33846267\_33843112\_+3155-Whsc1 | chr5 | Whsc1 | 0.202796353 | 0.364618359 | 0.180646022 | 3156 | 789 |
| chr5\_33868878\_33843112\_+25766-Whsc1 | chr5 | Whsc1 | 0 | 0.182309179 | 0 | 25767 | 1913 |
| chr5\_34444913\_34419998\_+24915-Fam193a | chr5 | Fam193a | 0 | 0 | 0.180646022 | 24916 | 1854 |
| chr5\_36525048\_36519273\_-5775-Tbc1d14 | chr5 | Tbc1d14 | 0.101398176 | 0 | 0 | 5776 | 427 |
| chr5\_3772787\_3747021\_-25766-Ankib1 | chr5 | Ankib1 | 4.258723409 | 3.09925605 | 3.612920447 | 25767 | 873 |
| chr5\_65594548\_65565989\_+28559-Ube2k | chr5 | Ube2k | 0 | 0.364618359 | 0.541938067 | 28560 | 465 |
| chr5\_73221072\_73194986\_-26086-Fryl | chr5 | Fryl | 0.202796353 | 0 | 0 | 26087 | 293 |
| chr6\_113409340\_113408905\_+435-Ttll3 | chr6 | Ttll3 | 0 | 0.182309179 | 0.180646022 | 436 | 436 |
| chr6\_115644642\_115634553\_-10089-Raf1 | chr6 | Raf1 | 0 | 0 | 0.180646022 | 10090 | 607 |
| chr6\_115644642\_115637599\_-7043-Raf1 | chr6 | Raf1 | 0.405592706 | 0.182309179 | 0 | 7044 | 346 |
| chr6\_116043805\_116042871\_-934-Tmcc1 | chr6 | Tmcc1 | 0.811185411 | 0 | 0.722584089 | 935 | 935 |
| chr6\_119921028\_119920110\_+918-Rad52 | chr6 | Rad52 | 0.405592706 | 0.546927538 | 0.722584089 | 919 | 303 |
| chr6\_124705656\_124705158\_-498-Emg1 | chr6 | Emg1 | 0.101398176 | 0 | 0.180646022 | 499 | 201 |
| chr6\_134066465\_134062064\_+4401-Etv6 | chr6 | Etv6 | 0.304194529 | 0 | 0 | 4402 | 4402 |
| chr6\_134513419\_134506196\_-7223-Lrp6 | chr6 | Lrp6 | 1.41957447 | 0 | 0.180646022 | 7224 | 898 |
| chr6\_17855028\_17834617\_+20411-St7 | chr6 | St7 | 0.202796353 | 0 | 0 | 20412 | 729 |
| chr6\_31433131\_31418931\_+14200-Mkln1 | chr6 | Mkln1 | 1.216778117 | 1.640782614 | 1.083876134 | 14201 | 608 |
| chr6\_31451584\_31418931\_+32653-Mkln1 | chr6 | Mkln1 | 0 | 0.364618359 | 0.361292045 | 32654 | 752 |
| chr6\_37364143\_37353557\_-10586-Creb3l2 | chr6 | Creb3l2 | 0 | 0 | 0.180646022 | 10587 | 724 |
| chr6\_38819313\_38818230\_-1083-Hipk2 | chr6 | Hipk2 | 0 | 0 | 0.180646022 | 1084 | 1084 |
| chr6\_47577667\_47540677\_-36990-Ezh2 | chr6 | Ezh2 | 2.230759881 | 2.005400973 | 3.974212491 | 36991 | 1940 |
| chr6\_47577667\_47576536\_-1131-Ezh2 | chr6 | Ezh2 | 0 | 0 | 0.180646022 | 1132 | 253 |
| chr6\_65901859\_65862915\_+38944-Prdm5 | chr6 | Prdm5 | 0.811185411 | 0.364618359 | 0 | 38945 | 758 |
| chr6\_65901859\_65869181\_+32678-Prdm5 | chr6 | Prdm5 | 0.811185411 | 0 | 0 | 32679 | 678 |
| chr6\_72132163\_72128264\_+3899-St3gal5 | chr6 | St3gal5 | 0 | 0.364618359 | 0 | 3900 | 236 |
| chr6\_88358642\_88355483\_-3159-Eefsec | chr6 | Eefsec | 0.202796353 | 1.458473435 | 0.722584089 | 3160 | 262 |
| chr6\_92164293\_92138987\_+25306-Nr2c2 | chr6 | Nr2c2 | 0 | 0.182309179 | 0 | 25307 | 1749 |
| chr6\_99435345\_99429210\_-6135-Foxp1 | chr6 | Foxp1 | 0.202796353 | 0 | 0 | 6136 | 6136 |
| chr6\_99456580\_99435216\_-21364-Foxp1 | chr6 | Foxp1 | 0.405592706 | 0 | 0 | 21365 | 21365 |
| chr7\_112759639\_112759384\_+255-Tead1 | chr7 | Tead1 | 0 | 0 | 0.361292045 | 256 | 256 |
| chr7\_121057399\_121047838\_+9561-Mettl9 | chr7 | Mettl9 | 0.811185411 | 0.546927538 | 0 | 9562 | 586 |
| chr7\_121057399\_121052087\_+5312-Mettl9 | chr7 | Mettl9 | 0.202796353 | 0.182309179 | 0 | 5313 | 395 |
| chr7\_125770703\_125760301\_+10402-D430042O09Rik | chr7 | D430042O09Rik | 0 | 0 | 0.180646022 | 10403 | 400 |
| chr7\_126552338\_126551975\_-363-Eif3c | chr7 | Eif3c | 0.202796353 | 0.182309179 | 0 | 364 | 364 |
| chr7\_132779385\_132759389\_-19996-Fam53b | chr7 | Fam53b | 0.202796353 | 0.546927538 | 0.180646022 | 19997 | 1081 |
| chr7\_132950435\_132948044\_+2391-Zranb1 | chr7 | Zranb1 | 1.013981764 | 3.828492767 | 2.167752268 | 2392 | 1016 |
| chr7\_132966694\_132949585\_+17109-Zranb1 | chr7 | Zranb1 | 0 | 0 | 0.180646022 | 17110 | 1039 |
| chr7\_132973623\_132948044\_+25579-Zranb1 | chr7 | Zranb1 | 0.405592706 | 0 | 0 | 25580 | 1629 |
| chr7\_132973623\_132949585\_+24038-Zranb1 | chr7 | Zranb1 | 0.608389058 | 0 | 0.361292045 | 24039 | 1464 |
| chr7\_132973623\_132966507\_+7116-Zranb1 | chr7 | Zranb1 | 0.405592706 | 0.546927538 | 0.361292045 | 7117 | 613 |
| chr7\_132973623\_132971186\_+2437-Zranb1 | chr7 | Zranb1 | 0 | 0.182309179 | 0 | 2438 | 425 |
| chr7\_134876315\_134874058\_+2257-Dock1 | chr7 | Dock1 | 0 | 0 | 0.361292045 | 2258 | 224 |
| chr7\_143527311\_143524161\_-3150-Nap1l4 | chr7 | Nap1l4 | 0 | 0.364618359 | 0 | 3151 | 289 |
| chr7\_34245978\_34244966\_-1012-4931406P16Rik | chr7 | 4931406P16Rik | 0 | 0.182309179 | 0 | 1013 | 1013 |
| chr7\_44916470\_44915841\_-629-Ap2a1 | chr7 | Ap2a1 | 1.41957447 | 0.182309179 | 0 | 630 | 406 |
| chr7\_49806626\_49786067\_+20559-Prmt3 | chr7 | Prmt3 | 0.202796353 | 0.182309179 | 0 | 20560 | 590 |
| chr7\_51897372\_51887912\_+9460-Gas2 | chr7 | Gas2 | 0 | 0 | 0.180646022 | 9461 | 287 |
| chr7\_59247217\_59240967\_+6250-Ube3a | chr7 | Ube3a | 0 | 1.093855076 | 0 | 6251 | 232 |
| chr7\_68004355\_68003810\_+545-Igf1r | chr7 | Igf1r | 0 | 0.182309179 | 0 | 546 | 546 |
| chr7\_84634409\_84632656\_-1753-Zfand6 | chr7 | Zfand6 | 0.202796353 | 0.182309179 | 0 | 1754 | 381 |
| chr7\_97664766\_97660813\_+3953-Rsf1 | chr7 | Rsf1 | 0.608389058 | 1.276164256 | 1.264522156 | 3954 | 1976 |
| chr7\_99955540\_99935162\_-20378-Rnf169 | chr7 | Rnf169 | 0.811185411 | 1.640782614 | 1.445168179 | 20379 | 340 |
| chr8\_108800691\_108792202\_+8489-Zfhx3 | chr8 | Zfhx3 | 0 | 0.182309179 | 0 | 8490 | 3265 |
| chr8\_108856953\_108792202\_+64751-Zfhx3 | chr8 | Zfhx3 | 0.202796353 | 0 | 0 | 64752 | 3497 |
| chr8\_120553802\_120553584\_+218-Gse1 | chr8 | Gse1 | 1.216778117 | 1.823091794 | 0 | 219 | 219 |
| chr8\_123383443\_123382527\_+916-Tcf25 | chr8 | Tcf25 | 0.608389058 | 0 | 0.180646022 | 917 | 194 |
| chr8\_127426753\_127415570\_+11183-Pard3 | chr8 | Pard3 | 0 | 0 | 0.361292045 | 11184 | 460 |
| chr8\_13142598\_13136796\_+5802-Cul4a | chr8 | Cul4a | 0.405592706 | 0 | 0 | 5803 | 328 |
| chr8\_24982122\_24978428\_-3694-Adam9 | chr8 | Adam9 | 0.405592706 | 0 | 0.180646022 | 3695 | 461 |
| chr8\_36938758\_36937560\_-1198-Dlc1 | chr8 | Dlc1 | 0 | 0 | 0.180646022 | 1199 | 1199 |
| chr8\_46818908\_46793493\_+25415-Irf2 | chr8 | Irf2 | 0.202796353 | 0 | 0 | 25416 | 535 |
| chr8\_47900856\_47899436\_-1420-Wwc2 | chr8 | Wwc2 | 0 | 0 | 0.180646022 | 1421 | 281 |
| chr8\_67720953\_67713683\_-7270-Psd3 | chr8 | Psd3 | 0 | 0.182309179 | 0 | 7271 | 447 |
| chr8\_67908889\_67882981\_-25908-Psd3 | chr8 | Psd3 | 0 | 0.182309179 | 0 | 25909 | 553 |
| chr8\_67908889\_67904117\_-4772-Psd3 | chr8 | Psd3 | 0 | 0 | 0.541938067 | 4773 | 460 |
| chr8\_67964354\_67960387\_-3967-Psd3 | chr8 | Psd3 | 0.608389058 | 0 | 0 | 3968 | 1459 |
| chr8\_72380306\_72367904\_-12402-Eps15l1 | chr8 | Eps15l1 | 0 | 0 | 0.180646022 | 12403 | 4640 |
| chr8\_77365160\_77310731\_-54429-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0 | 0 | 54430 | 639 |
| chr8\_77365160\_77344640\_-20520-Arhgap10 | chr8 | Arhgap10 | 2.636352587 | 3.281565229 | 4.877442603 | 20521 | 488 |
| chr8\_77450923\_77450693\_-230-Arhgap10 | chr8 | Arhgap10 | 0.405592706 | 0.182309179 | 0 | 231 | 158 |
| chr8\_79136663\_79091833\_+44830-Zfp827 | chr8 | Zfp827 | 0 | 0 | 0.180646022 | 44831 | 636 |
| chr8\_79136663\_79118175\_+18488-Zfp827 | chr8 | Zfp827 | 0.405592706 | 0.546927538 | 0.180646022 | 18489 | 402 |
| chr8\_79372364\_79371784\_-580-Smad1 | chr8 | Smad1 | 0.405592706 | 0.364618359 | 0 | 581 | 581 |
| chr8\_80800395\_80800101\_-294-Gab1 | chr8 | Gab1 | 0.405592706 | 0.182309179 | 0.180646022 | 295 | 295 |
| chr8\_84772315\_84771784\_-531-Nfix | chr8 | Nfix | 9.734224936 | 6.563130458 | 3.974212491 | 532 | 532 |
| chr8\_84864552\_84864058\_+494-Farsa | chr8 | Farsa | 0.405592706 | 0 | 0 | 495 | 338 |
| chr8\_85901957\_85875634\_+26323-Phkb | chr8 | Phkb | 0.608389058 | 0.182309179 | 0 | 26324 | 518 |
| chr8\_85922242\_85875634\_+46608-Phkb | chr8 | Phkb | 0.405592706 | 0.546927538 | 0.541938067 | 46609 | 634 |
| chr8\_85970997\_85935408\_+35589-Phkb | chr8 | Phkb | 0.608389058 | 1.823091794 | 0.361292045 | 35590 | 748 |
| chr8\_86862110\_86860426\_-1684-N4bp1 | chr8 | N4bp1 | 0.202796353 | 0 | 0 | 1685 | 1685 |
| chr8\_88723212\_88702305\_+20907-Cyld | chr8 | Cyld | 0.202796353 | 0.182309179 | 0 | 20908 | 1419 |
| chr8\_90933862\_90932249\_+1613-Chd9 | chr8 | Chd9 | 0.405592706 | 0.364618359 | 0 | 1614 | 1614 |
| chr8\_95366422\_95365314\_+1108-Mmp15 | chr8 | Mmp15 | 0.202796353 | 0 | 0.361292045 | 1109 | 278 |
| chr9\_108534618\_108533587\_+1031-Qrich1 | chr9 | Qrich1 | 0.405592706 | 0 | 0.180646022 | 1032 | 1032 |
| chr9\_116131713\_116129816\_-1897-Tgfbr2 | chr9 | Tgfbr2 | 0 | 0.546927538 | 0 | 1898 | 360 |
| chr9\_120959529\_120950173\_+9356-Ctnnb1 | chr9 | Ctnnb1 | 0 | 0.182309179 | 0.180646022 | 9357 | 2406 |
| chr9\_121731565\_121727316\_+4249-Nktr | chr9 | Nktr | 0 | 0.09115459 | 0 | 4250 | 316 |
| chr9\_122857161\_122856699\_-462-Zfp445 | chr9 | Zfp445 | 0.405592706 | 0 | 0.541938067 | 463 | 222 |
| chr9\_14575439\_14571623\_-3816-Amotl1 | chr9 | Amotl1 | 2.230759881 | 0.546927538 | 0.722584089 | 3817 | 524 |
| chr9\_16378254\_16374949\_-3305-Fat3 | chr9 | Fat3 | 0 | 1.093855076 | 0.722584089 | 3306 | 3306 |
| chr9\_21575518\_21569455\_+6063-Carm1 | chr9 | Carm1 | 0 | 0.182309179 | 0 | 6064 | 338 |
| chr9\_22514093\_22490818\_+23275-Bbs9 | chr9 | Bbs9 | 0.405592706 | 0 | 0 | 23276 | 453 |
| chr9\_22679064\_22643745\_+35319-Bbs9 | chr9 | Bbs9 | 1.013981764 | 0.182309179 | 0 | 35320 | 786 |
| chr9\_22887996\_22887581\_+415-Bbs9 | chr9 | Bbs9 | 2.027963528 | 0 | 0.903230112 | 416 | 243 |
| chr9\_24485729\_24462577\_-23152-Dpy19l1 | chr9 | Dpy19l1 | 0.202796353 | 0 | 0 | 23153 | 524 |
| chr9\_32208265\_32153040\_+55225-Arhgap32 | chr9 | Arhgap32 | 0.202796353 | 0 | 0 | 55226 | 686 |
| chr9\_42443075\_42437115\_-5960-Tbcel | chr9 | Tbcel | 0.202796353 | 0.182309179 | 0 | 5961 | 501 |
| chr9\_42451762\_42437115\_-14647-Tbcel | chr9 | Tbcel | 0.405592706 | 1.093855076 | 0 | 14648 | 973 |
| chr9\_45978729\_45972942\_-5787-Pafah1b2 | chr9 | Pafah1b2 | 0 | 0.182309179 | 0 | 5788 | 418 |
| chr9\_56147578\_56145489\_-2089-Tspan3 | chr9 | Tspan3 | 1.216778117 | 0 | 0.180646022 | 2090 | 606 |
| chr9\_62070613\_62068385\_-2228-Glce | chr9 | Glce | 0.202796353 | 0 | 0 | 2229 | 845 |
| chr9\_63619231\_63616686\_+2545-Aagab | chr9 | Aagab | 0.608389058 | 0 | 0 | 2546 | 462 |
| chr9\_64214609\_64204431\_-10178-Map2k1 | chr9 | Map2k1 | 0.202796353 | 0 | 0.722584089 | 10179 | 488 |
| chr9\_65795495\_65794622\_-873-Zfp609 | chr9 | Zfp609 | 0.608389058 | 0 | 0 | 874 | 874 |
| chr9\_66566903\_66540062\_-26841-Usp3 | chr9 | Usp3 | 0.405592706 | 0.364618359 | 0 | 26842 | 670 |
| chr9\_72726530\_72725017\_+1513-Nedd4 | chr9 | Nedd4 | 0.202796353 | 0 | 0 | 1514 | 186 |
| chr9\_80093641\_80087430\_+6211-Senp6 | chr9 | Senp6 | 0 | 0 | 0.361292045 | 6212 | 403 |
| chr9\_80103764\_80087430\_+16334-Senp6 | chr9 | Senp6 | 0.202796353 | 0 | 0 | 16335 | 495 |
| chr9\_82959851\_82945758\_-14093-Phip | chr9 | Phip | 0.405592706 | 0 | 0 | 14094 | 411 |
| chr9\_84012619\_83988776\_+23843-Bckdhb | chr9 | Bckdhb | 0.202796353 | 0 | 0 | 23844 | 608 |
| chr9\_8658377\_8634047\_+24330-Trpc6 | chr9 | Trpc6 | 0.405592706 | 0.182309179 | 0 | 24331 | 1356 |
| chr9\_96611499\_96591950\_-19549-Rasa2 | chr9 | Rasa2 | 0 | 0.729236718 | 0 | 19550 | 394 |
| chrX\_142834393\_142752040\_+82353-Tmem164 | chrX | Tmem164 | 0 | 0 | 0.180646022 | 82354 | 506 |
| chrX\_151399803\_151376748\_+23055-Fam120c | chrX | Fam120c | 0.811185411 | 0 | 0 | 23056 | 459 |
| chrX\_151843155\_151835224\_+7931-Huwe1 | chrX | Huwe1 | 0 | 0 | 0.180646022 | 7932 | 636 |
| chrX\_47887198\_47811158\_-76040-Smarca1 | chrX | Smarca1 | 0 | 0.182309179 | 0.180646022 | 76041 | 2946 |
| chr1\_10116731\_10082253\_+34478-Cspp1 | chr1 | Cspp1 | 0 | 0 | 0.180646022 | 34479 | 3436 |
| chr1\_105696757\_105691906\_+4851-2310035C23Rik | chr1 | 2310035C23Rik | 0.202796353 | 0 | 0 | 4852 | 786 |
| chr1\_106019905\_106011702\_+8203-Zcchc2 | chr1 | Zcchc2 | 0 | 0.364618359 | 0.361292045 | 8204 | 350 |
| chr1\_106031233\_106000931\_+30302-Zcchc2 | chr1 | Zcchc2 | 0.202796353 | 0 | 0 | 30303 | 2530 |
| chr1\_11142797\_11123121\_+19676-Prex2 | chr1 | Prex2 | 0 | 0.182309179 | 0 | 19677 | 688 |
| chr1\_11142797\_11139956\_+2841-Prex2 | chr1 | Prex2 | 0 | 0.182309179 | 0 | 2842 | 385 |
| chr1\_11266159\_11162240\_+103919-Prex2 | chr1 | Prex2 | 0.202796353 | 0 | 0 | 103920 | 2108 |
| chr1\_118309866\_118304691\_-5175-Tsn | chr1 | Tsn | 0.202796353 | 0 | 0 | 5176 | 387 |
| chr1\_118581463\_118570849\_+10614-Clasp1 | chr1 | Clasp1 | 0.202796353 | 0 | 0 | 10615 | 586 |
| chr1\_118590549\_118521827\_+68722-Clasp1 | chr1 | Clasp1 | 0 | 0 | 0.361292045 | 68723 | 2477 |
| chr1\_118590549\_118539266\_+51283-Clasp1 | chr1 | Clasp1 | 0 | 0 | 0.180646022 | 51284 | 2012 |
| chr1\_121312325\_121172433\_-139892-Gm41940 | chr1 | Gm41940 | 0 | 0.182309179 | 0 | 139893 | 139893 |
| chr1\_127803293\_127791605\_+11688-Ccnt2 | chr1 | Ccnt2 | 0.202796353 | 0 | 0 | 11689 | 1666 |
| chr1\_127803659\_127791605\_+12054-Ccnt2 | chr1 | Ccnt2 | 0.202796353 | 0.546927538 | 0.903230112 | 12055 | 2032 |
| chr1\_127803659\_127797841\_+5818-Ccnt2 | chr1 | Ccnt2 | 0 | 0.364618359 | 0 | 5819 | 1779 |
| chr1\_128211359\_128190638\_+20721-R3hdm1 | chr1 | R3hdm1 | 0.405592706 | 0.546927538 | 0.361292045 | 20722 | 678 |
| chr1\_128211359\_128193460\_+17899-R3hdm1 | chr1 | R3hdm1 | 0.202796353 | 0 | 0 | 17900 | 576 |
| chr1\_12822099\_12786079\_+36020-Sulf1 | chr1 | Sulf1 | 0 | 0 | 0.180646022 | 36021 | 1509 |
| chr1\_128221703\_128190638\_+31065-R3hdm1 | chr1 | R3hdm1 | 0 | 0.182309179 | 0 | 31066 | 934 |
| chr1\_128235626\_128190638\_+44988-R3hdm1 | chr1 | R3hdm1 | 0 | 0.364618359 | 0 | 44989 | 1492 |
| chr1\_128262957\_128252203\_+10754-Ubxn4 | chr1 | Ubxn4 | 0 | 0 | 0.361292045 | 10755 | 740 |
| chr1\_12939200\_12894427\_-44773-Slco5a1 | chr1 | Slco5a1 | 0 | 0 | 0.180646022 | 44774 | 576 |
| chr1\_130684070\_130682149\_-1921-na | chr1 | na | 0.608389058 | 0 | 0.180646022 | 1922 | 1922 |
| chr1\_13167106\_13156370\_-10736-Ncoa2 | chr1 | Ncoa2 | 0 | 0.182309179 | 0 | 10737 | 945 |
| chr1\_132019466\_132014383\_+5083-Elk4 | chr1 | Elk4 | 0 | 0.182309179 | 0 | 5084 | 1203 |
| chr1\_132023838\_132019350\_+4488-Elk4 | chr1 | Elk4 | 0 | 0 | 0.361292045 | 4489 | 403 |
| chr1\_132391394\_132391096\_-298-na | chr1 | na | 0 | 0 | 0.180646022 | 299 | 299 |
| chr1\_132434487\_132434099\_+388-Dstyk | chr1 | Dstyk | 0 | 0.182309179 | 0 | 389 | 389 |
| chr1\_133645846\_133637349\_-8497-Zc3h11a | chr1 | Zc3h11a | 0 | 0.182309179 | 0 | 8498 | 757 |
| chr1\_133647529\_133633762\_-13767-Zc3h11a | chr1 | Zc3h11a | 0 | 0.182309179 | 0.180646022 | 13768 | 1110 |
| chr1\_134842733\_134834435\_-8298-Ppp1r12b | chr1 | Ppp1r12b | 0.608389058 | 0.182309179 | 0.903230112 | 8299 | 625 |
| chr1\_134879745\_134835785\_-43960-Ppp1r12b | chr1 | Ppp1r12b | 0 | 0 | 0.090323011 | 43961 | 1472 |
| chr1\_134879745\_134865778\_-13967-Ppp1r12b | chr1 | Ppp1r12b | 0.202796353 | 0.182309179 | 0.361292045 | 13968 | 932 |
| chr1\_135607904\_135602545\_-5359-Nav1 | chr1 | Nav1 | 0.202796353 | 0 | 0 | 5360 | 847 |
| chr1\_13576452\_13569471\_-6981-Tram1 | chr1 | Tram1 | 0.202796353 | 0 | 0 | 6982 | 566 |
| chr1\_136105576\_136100600\_+4976-Cacna1s | chr1 | Cacna1s | 0 | 0.182309179 | 0 | 4977 | 381 |
| chr1\_138561785\_138515625\_-46160-Nek7 | chr1 | Nek7 | 0 | 0 | 0.361292045 | 46161 | 615 |
| chr1\_139042043\_139040000\_+2043-Dennd1b | chr1 | Dennd1b | 0 | 0 | 0.361292045 | 2044 | 170 |
| chr1\_139110485\_139060275\_+50210-Dennd1b | chr1 | Dennd1b | 0 | 0.182309179 | 0 | 50211 | 642 |
| chr1\_139110485\_139081173\_+29312-Dennd1b | chr1 | Dennd1b | 0.405592706 | 0.182309179 | 0 | 29313 | 477 |
| chr1\_139110485\_139085883\_+24602-Dennd1b | chr1 | Dennd1b | 0.202796353 | 0 | 0 | 24603 | 376 |
| chr1\_139144000\_139053346\_+90654-Dennd1b | chr1 | Dennd1b | 0 | 0.182309179 | 0 | 90655 | 1219 |
| chr1\_14253102\_14208895\_-44207-Eya1 | chr1 | Eya1 | 0.608389058 | 0.182309179 | 0 | 44208 | 584 |
| chr1\_14253102\_14229493\_-23609-Eya1 | chr1 | Eya1 | 0 | 0.729236718 | 0 | 23610 | 494 |
| chr1\_143603858\_143603741\_+117-na | chr1 | na | 0.202796353 | 0 | 0 | 118 | 118 |
| chr1\_151442710\_151440806\_+1904-Trmt1l | chr1 | Trmt1l | 0 | 0.364618359 | 0 | 1905 | 254 |
| chr1\_151443326\_151439516\_+3810-Trmt1l | chr1 | Trmt1l | 0 | 0.182309179 | 0 | 3811 | 399 |
| chr1\_152859502\_152855849\_-3653-Smg7 | chr1 | Smg7 | 0 | 0.182309179 | 0 | 3654 | 604 |
| chr1\_152866713\_152840035\_-26678-Smg7 | chr1 | Smg7 | 0.202796353 | 0 | 0 | 26679 | 3262 |
| chr1\_155191554\_155173986\_+17568-Stx6 | chr1 | Stx6 | 0.202796353 | 0 | 0 | 17569 | 454 |
| chr1\_155624958\_155615867\_+9091-Acbd6 | chr1 | Acbd6 | 0 | 0 | 0.180646022 | 9092 | 196 |
| chr1\_155848727\_155847110\_-1617-na | chr1 | na | 0.202796353 | 0 | 0 | 1618 | 1618 |
| chr1\_155914879\_155911888\_-2991-Cep350 | chr1 | Cep350 | 0 | 0 | 0.180646022 | 2992 | 275 |
| chr1\_160702460\_160682041\_-20419-Rabgap1l | chr1 | Rabgap1l | 0 | 0.182309179 | 0 | 20420 | 412 |
| chr1\_160724189\_160627215\_-96974-Rabgap1l | chr1 | Rabgap1l | 0 | 0.364618359 | 0 | 96975 | 993 |
| chr1\_160724189\_160682041\_-42148-Rabgap1l | chr1 | Rabgap1l | 0.202796353 | 0 | 0 | 42149 | 748 |
| chr1\_160739088\_160733529\_-5559-Rabgap1l | chr1 | Rabgap1l | 0 | 0.182309179 | 0 | 5560 | 579 |
| chr1\_160740931\_160627215\_-113716-Rabgap1l | chr1 | Rabgap1l | 0.202796353 | 0 | 0 | 113717 | 1752 |
| chr1\_160740931\_160710147\_-30784-Rabgap1l | chr1 | Rabgap1l | 0 | 0 | 0.180646022 | 30785 | 1095 |
| chr1\_163262015\_163253977\_-8038-Prrx1 | chr1 | Prrx1 | 0 | 0.182309179 | 0 | 8039 | 430 |
| chr1\_163262015\_163257761\_-4254-Prrx1 | chr1 | Prrx1 | 0.202796353 | 0.546927538 | 0 | 4255 | 358 |
| chr1\_163829295\_163825688\_+3607-Kifap3 | chr1 | Kifap3 | 0 | 0.182309179 | 0 | 3608 | 342 |
| chr1\_16440458\_16389821\_-50637-Stau2 | chr1 | Stau2 | 0.202796353 | 0 | 0.180646022 | 50638 | 617 |
| chr1\_165228447\_165220099\_-8348-Tiprl | chr1 | Tiprl | 0 | 0.182309179 | 0 | 8349 | 508 |
| chr1\_165352076\_165350884\_-1192-Dcaf6 | chr1 | Dcaf6 | 0.608389058 | 0 | 0.180646022 | 1193 | 582 |
| chr1\_165357546\_165350884\_-6662-Dcaf6 | chr1 | Dcaf6 | 0.202796353 | 0.729236718 | 0 | 6663 | 788 |
| chr1\_165367505\_165357429\_-10076-Dcaf6 | chr1 | Dcaf6 | 0.202796353 | 0.09115459 | 0 | 10077 | 178 |
| chr1\_165371248\_165350884\_-20364-Dcaf6 | chr1 | Dcaf6 | 0 | 0.182309179 | 0 | 20365 | 20365 |
| chr1\_165374235\_165367446\_-6789-Dcaf6 | chr1 | Dcaf6 | 0.405592706 | 0 | 0 | 6790 | 234 |
| chr1\_165392232\_165367446\_-24786-na | chr1 | na | 0.101398176 | 0 | 0 | 24787 | 24787 |
| chr1\_165392232\_165388658\_-3574-Dcaf6 | chr1 | Dcaf6 | 0 | 0.546927538 | 0.180646022 | 3575 | 472 |
| chr1\_165399868\_165388658\_-11210-Dcaf6 | chr1 | Dcaf6 | 0 | 0.364618359 | 0 | 11211 | 687 |
| chr1\_165411599\_165388658\_-22941-Dcaf6 | chr1 | Dcaf6 | 0 | 0.546927538 | 0.541938067 | 22942 | 823 |
| chr1\_165424394\_165411464\_-12930-Dcaf6 | chr1 | Dcaf6 | 0 | 0 | 0.180646022 | 12931 | 529 |
| chr1\_165429315\_165411464\_-17851-Dcaf6 | chr1 | Dcaf6 | 0 | 0 | 0.361292045 | 17852 | 591 |
| chr1\_165608604\_165601750\_-6854-Mpzl1 | chr1 | Mpzl1 | 0.202796353 | 0 | 0 | 6855 | 620 |
| chr1\_16585431\_16345704\_-239727-Stau2 | chr1 | Stau2 | 0 | 0.182309179 | 0 | 239728 | 239728 |
| chr1\_16585431\_16581927\_-3504-Ube2w | chr1 | Ube2w | 0 | 0 | 0.361292045 | 3505 | 232 |
| chr1\_165931727\_165875382\_-56345-Pou2f1 | chr1 | Pou2f1 | 0.202796353 | 0 | 0 | 56346 | 2677 |
| chr1\_165931727\_165916311\_-15416-Pou2f1 | chr1 | Pou2f1 | 0 | 0.182309179 | 0 | 15417 | 15417 |
| chr1\_17016157\_17016039\_-118-Jph1 | chr1 | Jph1 | 0 | 0 | 0.722584089 | 119 | 119 |
| chr1\_17017651\_16997464\_-20187-Jph1 | chr1 | Jph1 | 0 | 0.182309179 | 0 | 20188 | 20188 |
| chr1\_170779989\_170779446\_-543-na | chr1 | na | 0.405592706 | 0 | 0 | 544 | 544 |
| chr1\_170794770\_170787346\_-7424-Atf6 | chr1 | Atf6 | 0 | 0.364618359 | 0 | 7425 | 397 |
| chr1\_170799745\_170787346\_-12399-Atf6 | chr1 | Atf6 | 0.405592706 | 0 | 0 | 12400 | 529 |
| chr1\_170841812\_170834820\_-6992-Atf6 | chr1 | Atf6 | 0 | 0.364618359 | 0 | 6993 | 552 |
| chr1\_17092057\_16996795\_-95262-Jph1 | chr1 | Jph1 | 0.202796353 | 0 | 0 | 95263 | 2288 |
| chr1\_17092057\_16997464\_-94593-Jph1 | chr1 | Jph1 | 0.202796353 | 0 | 0.180646022 | 94594 | 1619 |
| chr1\_17092057\_17016039\_-76018-Jph1 | chr1 | Jph1 | 0.202796353 | 0 | 0.090323011 | 76019 | 879 |
| chr1\_17092057\_17054066\_-37991-Jph1 | chr1 | Jph1 | 0.202796353 | 0 | 0 | 37992 | 37992 |
| chr1\_17092057\_17091298\_-759-Jph1 | chr1 | Jph1 | 1.216778117 | 1.093855076 | 0.180646022 | 760 | 760 |
| chr1\_171138755\_171135993\_-2762-na | chr1 | na | 0.101398176 | 0 | 0 | 2763 | 2763 |
| chr1\_17158503\_17144109\_+14394-Gdap1 | chr1 | Gdap1 | 0.202796353 | 0 | 0 | 14395 | 14395 |
| chr1\_17163664\_17161720\_+1944-na | chr1 | na | 0 | 0.182309179 | 0.180646022 | 1945 | 1945 |
| chr1\_172099767\_172092245\_+7522-Copa | chr1 | Copa | 0.202796353 | 0.182309179 | 0 | 7523 | 320 |
| chr1\_172187460\_172173943\_+13517-Dcaf8 | chr1 | Dcaf8 | 1.825167175 | 0.546927538 | 2.167752268 | 13518 | 586 |
| chr1\_172278387\_172274569\_-3818-Atp1a2 | chr1 | Atp1a2 | 0.202796353 | 0 | 0 | 3819 | 486 |
| chr1\_176774910\_176755166\_-19744-Cep170 | chr1 | Cep170 | 0.405592706 | 0 | 0 | 19745 | 3204 |
| chr1\_176831182\_176824752\_+6430-Sdccag8 | chr1 | Sdccag8 | 0 | 0 | 0.180646022 | 6431 | 479 |
| chr1\_177131096\_177096967\_-34129-Akt3 | chr1 | Akt3 | 0.202796353 | 0 | 0 | 34130 | 515 |
| chr1\_177248881\_177078774\_-170107-Akt3 | chr1 | Akt3 | 0 | 0.182309179 | 0 | 170108 | 856 |
| chr1\_177430211\_177428205\_-2006-na | chr1 | na | 0 | 0 | 0.180646022 | 2007 | 2007 |
| chr1\_177776879\_177771141\_-5738-Adss | chr1 | Adss | 0 | 0 | 0.361292045 | 5739 | 664 |
| chr1\_178925298\_178913704\_-11594-na | chr1 | na | 0.202796353 | 0 | 0 | 11595 | 11595 |
| chr1\_179094402\_179043737\_-50665-Smyd3 | chr1 | Smyd3 | 0 | 0.182309179 | 0 | 50666 | 545 |
| chr1\_179233324\_179229110\_-4214-na | chr1 | na | 0.202796353 | 0 | 0 | 4215 | 4215 |
| chr1\_179423418\_179405283\_-18135-Smyd3 | chr1 | Smyd3 | 0.811185411 | 0 | 0.361292045 | 18136 | 367 |
| chr1\_179494864\_179405283\_-89581-Smyd3 | chr1 | Smyd3 | 0.101398176 | 0 | 0 | 89582 | 89582 |
| chr1\_180179284\_180178577\_-707-Adck3 | chr1 | Adck3 | 0.202796353 | 0 | 0 | 708 | 469 |
| chr1\_181930762\_181917199\_-13563-Enah | chr1 | Enah | 0 | 0.182309179 | 0 | 13564 | 1767 |
| chr1\_184834028\_184832576\_-1452-Marc2 | chr1 | Marc2 | 0 | 0 | 0.180646022 | 1453 | 310 |
| chr1\_185267279\_185266901\_+378-Rab3gap2 | chr1 | Rab3gap2 | 0.202796353 | 1.093855076 | 0 | 379 | 281 |
| chr1\_185387118\_185369577\_+17541-Eprs | chr1 | Eprs | 0 | 0 | 0.180646022 | 17542 | 1363 |
| chr1\_185413550\_185386246\_+27304-Eprs | chr1 | Eprs | 0.202796353 | 0 | 0 | 27305 | 2227 |
| chr1\_187322354\_187316524\_+5830-Gpatch2 | chr1 | Gpatch2 | 0.202796353 | 0 | 0 | 5831 | 111 |
| chr1\_188066457\_188043334\_+23123-Esrrg | chr1 | Esrrg | 0 | 0.364618359 | 0 | 23124 | 533 |
| chr1\_189798681\_189779506\_+19175-Ptpn14 | chr1 | Ptpn14 | 0 | 0.364618359 | 0.361292045 | 19176 | 19176 |
| chr1\_189860586\_189839472\_+21114-Ptpn14 | chr1 | Ptpn14 | 0.405592706 | 0 | 0 | 21115 | 2284 |
| chr1\_189882908\_189882535\_+373-na | chr1 | na | 0.202796353 | 0 | 0 | 374 | 374 |
| chr1\_189909914\_189896571\_-13343-Smyd2 | chr1 | Smyd2 | 0 | 0.182309179 | 0 | 13344 | 361 |
| chr1\_190162313\_190153416\_-8897-Prox1 | chr1 | Prox1 | 0 | 0.182309179 | 0 | 8898 | 1900 |
| chr1\_190844602\_190782535\_-62067-Rps6kc1 | chr1 | Rps6kc1 | 0.202796353 | 0 | 0 | 62068 | 2228 |
| chr1\_190885427\_190884560\_-867-Rps6kc1 | chr1 | Rps6kc1 | 0 | 0.182309179 | 0 | 868 | 868 |
| chr1\_190888764\_190871592\_-17172-Rps6kc1 | chr1 | Rps6kc1 | 0.202796353 | 0 | 0 | 17173 | 570 |
| chr1\_191012242\_191009549\_-2693-Mfsd7b | chr1 | Mfsd7b | 0 | 0 | 0.180646022 | 2694 | 436 |
| chr1\_191012242\_191011536\_-706-Mfsd7b | chr1 | Mfsd7b | 0 | 0.182309179 | 0 | 707 | 215 |
| chr1\_191021256\_191012139\_-9117-Mfsd7b | chr1 | Mfsd7b | 0.405592706 | 0 | 0 | 9118 | 621 |
| chr1\_191021256\_191015358\_-5898-Mfsd7b | chr1 | Mfsd7b | 0 | 0 | 0.180646022 | 5899 | 449 |
| chr1\_192126027\_192123539\_-2488-Rcor3 | chr1 | Rcor3 | 0.202796353 | 0.182309179 | 0.361292045 | 2489 | 366 |
| chr1\_195024406\_195018548\_+5858-A330023F24Rik | chr1 | A330023F24Rik | 0 | 0 | 0.180646022 | 5859 | 5859 |
| chr1\_195077836\_195064688\_-13148-Cd46 | chr1 | Cd46 | 0 | 0.182309179 | 0 | 13149 | 1355 |
| chr1\_21593614\_21457404\_-136210-Kcnq5 | chr1 | Kcnq5 | 0.405592706 | 0 | 0 | 136211 | 1127 |
| chr1\_21678782\_21424049\_-254733-Kcnq5 | chr1 | Kcnq5 | 0 | 0.182309179 | 0 | 254734 | 254734 |
| chr1\_24537002\_24529928\_-7074-Col19a1 | chr1 | Col19a1 | 0 | 0.182309179 | 0 | 7075 | 481 |
| chr1\_24575459\_24559654\_-15805-Col19a1 | chr1 | Col19a1 | 0 | 0 | 0.180646022 | 15806 | 293 |
| chr1\_24731899\_24685397\_+46502-Lmbrd1 | chr1 | Lmbrd1 | 0.202796353 | 0 | 0 | 46503 | 846 |
| chr1\_24731899\_24711512\_+20387-Lmbrd1 | chr1 | Lmbrd1 | 0 | 0 | 0.361292045 | 20388 | 442 |
| chr1\_24744358\_24705977\_+38381-Lmbrd1 | chr1 | Lmbrd1 | 0.202796353 | 0 | 0 | 38382 | 678 |
| chr1\_24748878\_24711512\_+37366-Lmbrd1 | chr1 | Lmbrd1 | 0 | 0.182309179 | 0 | 37367 | 944 |
| chr1\_30811967\_30810683\_-1284-Phf3 | chr1 | Phf3 | 0 | 0 | 0.180646022 | 1285 | 344 |
| chr1\_30863255\_30829843\_-33412-Phf3 | chr1 | Phf3 | 0 | 0 | 0.180646022 | 33413 | 2148 |
| chr1\_33786532\_33779044\_-7488-Zfp451 | chr1 | Zfp451 | 0 | 0 | 0.361292045 | 7489 | 818 |
| chr1\_34135256\_34086242\_+49014-Dst | chr1 | Dst | 0 | 0 | 0.180646022 | 49015 | 526 |
| chr1\_34135256\_34113933\_+21323-Dst | chr1 | Dst | 0 | 0 | 0.180646022 | 21324 | 464 |
| chr1\_34135256\_34114549\_+20707-Dst | chr1 | Dst | 0 | 0.182309179 | 0 | 20708 | 374 |
| chr1\_34135256\_34135090\_+166-Dst | chr1 | Dst | 0 | 0.182309179 | 0 | 167 | 167 |
| chr1\_34154632\_34114549\_+40083-Dst | chr1 | Dst | 0 | 0 | 0.180646022 | 40084 | 714 |
| chr1\_34196061\_34116118\_+79943-Dst | chr1 | Dst | 0 | 0.546927538 | 0.361292045 | 79944 | 10446 |
| chr1\_34229246\_34197201\_+32045-Dst | chr1 | Dst | 0 | 0.182309179 | 0 | 32046 | 5082 |
| chr1\_34229246\_34223804\_+5442-Dst | chr1 | Dst | 0.811185411 | 0.546927538 | 0.361292045 | 5443 | 2168 |
| chr1\_34294546\_34171116\_+123430-Dst | chr1 | Dst | 0 | 0.182309179 | 0 | 123431 | 17836 |
| chr1\_34295536\_34262020\_+33516-Dst | chr1 | Dst | 0 | 0 | 0.180646022 | 33517 | 3771 |
| chr1\_36197635\_36191529\_-6106-Uggt1 | chr1 | Uggt1 | 0 | 0.182309179 | 0.180646022 | 6107 | 449 |
| chr1\_36197635\_36195850\_-1785-Uggt1 | chr1 | Uggt1 | 0 | 0 | 1.083876134 | 1786 | 243 |
| chr1\_36201765\_36173435\_-28330-Uggt1 | chr1 | Uggt1 | 0.202796353 | 0 | 0 | 28331 | 1752 |
| chr1\_36202878\_36184356\_-18522-Uggt1 | chr1 | Uggt1 | 0 | 0 | 0.180646022 | 18523 | 878 |
| chr1\_36221324\_36207942\_-13382-Uggt1 | chr1 | Uggt1 | 0 | 0.182309179 | 0 | 13383 | 565 |
| chr1\_36823153\_36815455\_-7698-Tmem131 | chr1 | Tmem131 | 0.608389058 | 0 | 0 | 7699 | 750 |
| chr1\_36825346\_36816109\_-9237-Tmem131 | chr1 | Tmem131 | 0 | 0 | 0.180646022 | 9238 | 813 |
| chr1\_37143067\_37128884\_+14183-Vwa3b | chr1 | Vwa3b | 0.608389058 | 0 | 0 | 14184 | 825 |
| chr1\_37811027\_37801720\_-9307-Tsga10 | chr1 | Tsga10 | 0 | 0 | 0.361292045 | 9308 | 522 |
| chr1\_38099021\_38079290\_-19731-Rev1 | chr1 | Rev1 | 0 | 0.182309179 | 0 | 19732 | 1560 |
| chr1\_38099021\_38083704\_-15317-Rev1 | chr1 | Rev1 | 0.202796353 | 0 | 0 | 15318 | 1251 |
| chr1\_39402923\_39389308\_-13615-Tbc1d8 | chr1 | Tbc1d8 | 0 | 0 | 0.180646022 | 13616 | 969 |
| chr1\_40862225\_40859923\_+2302-na | chr1 | na | 0 | 0 | 0.180646022 | 2303 | 2303 |
| chr1\_43075952\_43067474\_-8478-Tgfbrap1 | chr1 | Tgfbrap1 | 0 | 0 | 0.180646022 | 8479 | 1052 |
| chr1\_43111373\_43100715\_+10658-AI597479 | chr1 | AI597479 | 0.202796353 | 0 | 0 | 10659 | 543 |
| chr1\_43533793\_43512963\_+20830-Nck2 | chr1 | Nck2 | 0.202796353 | 0 | 0 | 20831 | 20831 |
| chr1\_43992394\_43960084\_+32310-Tpp2 | chr1 | Tpp2 | 0 | 0 | 0.361292045 | 32311 | 2355 |
| chr1\_44164084\_44161810\_+2274-Ercc5 | chr1 | Ercc5 | 0 | 0.364618359 | 0 | 2275 | 352 |
| chr1\_44167882\_44156937\_+10945-Ercc5 | chr1 | Ercc5 | 0.202796353 | 0 | 0 | 10946 | 2411 |
| chr1\_44708678\_44689144\_+19534-Gulp1 | chr1 | Gulp1 | 0 | 0.182309179 | 0 | 19535 | 134 |
| chr1\_5098133\_5089009\_+9124-Atp6v1h | chr1 | Atp6v1h | 0 | 0.546927538 | 0.361292045 | 9125 | 412 |
| chr1\_5150061\_5117390\_+32671-Atp6v1h | chr1 | Atp6v1h | 0 | 0 | 0.180646022 | 32672 | 812 |
| chr1\_52215694\_52188679\_-27015-Gls | chr1 | Gls | 0 | 0 | 0.180646022 | 27016 | 1216 |
| chr1\_53282092\_53216231\_-65861-Pms1 | chr1 | Pms1 | 0 | 0 | 0.180646022 | 65862 | 719 |
| chr1\_53933288\_53885329\_-47959-Hecw2 | chr1 | Hecw2 | 0.405592706 | 0 | 0 | 47960 | 2782 |
| chr1\_54681191\_54397806\_-283385-Pgap1 | chr1 | Pgap1 | 0 | 0.182309179 | 0 | 283386 | 283386 |
| chr1\_54743428\_54723014\_-20414-Ankrd44 | chr1 | Ankrd44 | 0.202796353 | 0 | 0.180646022 | 20415 | 719 |
| chr1\_54766984\_54752890\_-14094-Ankrd44 | chr1 | Ankrd44 | 0.202796353 | 0 | 0 | 14095 | 724 |
| chr1\_54835257\_54723014\_-112243-Ankrd44 | chr1 | Ankrd44 | 0 | 0 | 0.180646022 | 112244 | 112244 |
| chr1\_54835257\_54792453\_-42804-Ankrd44 | chr1 | Ankrd44 | 0 | 0 | 0.180646022 | 42805 | 42805 |
| chr1\_54835257\_54828612\_-6645-Ankrd44 | chr1 | Ankrd44 | 0 | 0.182309179 | 0.180646022 | 6646 | 6646 |
| chr1\_54835257\_54828612\_-6645-na | chr1 | na | 0.101398176 | 0 | 0 | 6646 | 6646 |
| chr1\_54877821\_54828612\_-49209-Ankrd44 | chr1 | Ankrd44 | 0 | 0.182309179 | 0 | 49210 | 432 |
| chr1\_55016883\_55012102\_-4781-Sf3b1 | chr1 | Sf3b1 | 0 | 0 | 0.180646022 | 4782 | 1978 |
| chr1\_55715603\_55692630\_+22973-Plcl1 | chr1 | Plcl1 | 0 | 0 | 0.180646022 | 22974 | 22974 |
| chr1\_55715603\_55695745\_+19858-Plcl1 | chr1 | Plcl1 | 0.202796353 | 0 | 0 | 19859 | 2865 |
| chr1\_55717475\_55701930\_+15545-na | chr1 | na | 0 | 0 | 0.090323011 | 15546 | 15546 |
| chr1\_55717475\_55701930\_+15545-Plcl1 | chr1 | Plcl1 | 0.405592706 | 0.182309179 | 0 | 15546 | 15546 |
| chr1\_58992375\_58976959\_+15416-Stradb | chr1 | Stradb | 0 | 0.182309179 | 0 | 15417 | 815 |
| chr1\_59199191\_59191889\_-7302-Als2 | chr1 | Als2 | 0.202796353 | 0.182309179 | 0 | 7303 | 582 |
| chr1\_60109449\_60105311\_+4138-Carf | chr1 | Carf | 0 | 0.364618359 | 0 | 4139 | 470 |
| chr1\_60237216\_60234797\_+2419-Nbeal1 | chr1 | Nbeal1 | 0 | 0 | 0.722584089 | 2420 | 933 |
| chr1\_60244883\_60222067\_+22816-Nbeal1 | chr1 | Nbeal1 | 0 | 0.182309179 | 0 | 22817 | 1998 |
| chr1\_60260793\_60260233\_+560-Nbeal1 | chr1 | Nbeal1 | 0.202796353 | 0 | 0 | 561 | 561 |
| chr1\_60499623\_60493538\_-6085-Raph1 | chr1 | Raph1 | 0 | 0 | 0.180646022 | 6086 | 618 |
| chr1\_62211704\_62198577\_+13127-Pard3b | chr1 | Pard3b | 0 | 0 | 0.361292045 | 13128 | 357 |
| chr1\_62350553\_62343934\_+6619-Pard3b | chr1 | Pard3b | 0.405592706 | 0 | 0 | 6620 | 6620 |
| chr1\_63086398\_63085668\_-730-Ino80d | chr1 | Ino80d | 0.202796353 | 0 | 0 | 731 | 731 |
| chr1\_63165030\_63151551\_-13479-Ndufs1 | chr1 | Ndufs1 | 0 | 0 | 0.180646022 | 13480 | 1215 |
| chr1\_64079334\_64078707\_-627-Klf7 | chr1 | Klf7 | 0.202796353 | 0 | 0 | 628 | 628 |
| chr1\_64892897\_64883129\_-9768-Plekhm3 | chr1 | Plekhm3 | 0 | 0.182309179 | 0 | 9769 | 340 |
| chr1\_65205678\_65190319\_+15359-Pikfyve | chr1 | Pikfyve | 0 | 0.364618359 | 0 | 15360 | 956 |
| chr1\_65205678\_65195656\_+10022-Pikfyve | chr1 | Pikfyve | 0.202796353 | 0 | 0 | 10023 | 589 |
| chr1\_69685797\_69570493\_-115304-Ikzf2 | chr1 | Ikzf2 | 0 | 0 | 0.180646022 | 115305 | 696 |
| chr1\_7120615\_7098879\_+21736-Pcmtd1 | chr1 | Pcmtd1 | 0 | 0.182309179 | 0 | 21737 | 21737 |
| chr1\_7120615\_7120194\_+421-Pcmtd1 | chr1 | Pcmtd1 | 0.202796353 | 0.364618359 | 0.722584089 | 422 | 422 |
| chr1\_72198769\_72192043\_-6726-Mreg | chr1 | Mreg | 0 | 0 | 0.180646022 | 6727 | 6727 |
| chr1\_72383769\_72381619\_+2150-Xrcc5 | chr1 | Xrcc5 | 0 | 0.364618359 | 0 | 2151 | 275 |
| chr1\_73829966\_73817217\_-12749-Gm29183 | chr1 | Gm29183 | 0 | 0 | 0.180646022 | 12750 | 12750 |
| chr1\_73937317\_73916439\_-20878-Tns1 | chr1 | Tns1 | 0 | 0.182309179 | 0 | 20879 | 2152 |
| chr1\_74585697\_74585384\_-313-Zfp142 | chr1 | Zfp142 | 0 | 0 | 0.180646022 | 314 | 314 |
| chr1\_75402473\_75401055\_+1418-Speg | chr1 | Speg | 0 | 0.364618359 | 0 | 1419 | 441 |
| chr1\_75411461\_75411286\_+175-Speg | chr1 | Speg | 0 | 0 | 0.361292045 | 176 | 176 |
| chr1\_75414428\_75411286\_+3142-Speg | chr1 | Speg | 0 | 0.182309179 | 0 | 3143 | 289 |
| chr1\_75415168\_75411286\_+3882-Speg | chr1 | Speg | 0.405592706 | 0 | 0 | 3883 | 458 |
| chr1\_78694346\_78688237\_+6109-Acsl3 | chr1 | Acsl3 | 0.202796353 | 0 | 0 | 6110 | 578 |
| chr1\_80278088\_80271524\_-6564-Cul3 | chr1 | Cul3 | 0 | 0 | 0.180646022 | 6565 | 544 |
| chr1\_80283821\_80277964\_-5857-Cul3 | chr1 | Cul3 | 0 | 0 | 0.180646022 | 5858 | 727 |
| chr1\_82342862\_82340319\_+2543-Rhbdd1 | chr1 | Rhbdd1 | 0.608389058 | 0 | 0 | 2544 | 645 |
| chr1\_84751980\_84749158\_-2822-Trip12 | chr1 | Trip12 | 0 | 0 | 1.445168179 | 2823 | 610 |
| chr1\_84794327\_84776317\_-18010-Trip12 | chr1 | Trip12 | 0 | 0.182309179 | 0.361292045 | 18011 | 1226 |
| chr1\_86083275\_86071614\_+11661-Psmd1 | chr1 | Psmd1 | 0.202796353 | 0 | 0 | 11662 | 1011 |
| chr1\_86606199\_86589164\_+17035-Cops7b | chr1 | Cops7b | 0 | 0.182309179 | 0 | 17036 | 1794 |
| chr1\_86821450\_86791416\_+30034-Dis3l2 | chr1 | Dis3l2 | 0 | 0.182309179 | 0 | 30035 | 349 |
| chr1\_87233249\_87232403\_+846-Eif4e2 | chr1 | Eif4e2 | 0.202796353 | 0 | 0 | 847 | 847 |
| chr1\_87374111\_87364104\_+10007-Gigyf2 | chr1 | Gigyf2 | 0.811185411 | 0.182309179 | 0 | 10008 | 341 |
| chr1\_87403846\_87364104\_+39742-Gigyf2 | chr1 | Gigyf2 | 0 | 0 | 0.180646022 | 39743 | 674 |
| chr1\_87436891\_87364104\_+72787-Gigyf2 | chr1 | Gigyf2 | 0 | 0 | 0.180646022 | 72788 | 2851 |
| chr1\_87918721\_87915100\_+3621-Dgkd | chr1 | Dgkd | 0.202796353 | 0.364618359 | 0.180646022 | 3622 | 737 |
| chr1\_87921681\_87915100\_+6581-Dgkd | chr1 | Dgkd | 0.202796353 | 0 | 0 | 6582 | 846 |
| chr1\_87938265\_87936749\_+1516-Dgkd | chr1 | Dgkd | 0 | 0 | 0.180646022 | 1517 | 264 |
| chr1\_87952458\_87948502\_-3956-Usp40 | chr1 | Usp40 | 0.202796353 | 0 | 0 | 3957 | 587 |
| chr1\_89665189\_89665034\_+155-Agap1 | chr1 | Agap1 | 0 | 0 | 0.361292045 | 156 | 156 |
| chr1\_90612336\_90610093\_+2243-Cops8 | chr1 | Cops8 | 0.405592706 | 0 | 0 | 2244 | 382 |
| chr1\_91105297\_91084946\_+20351-Lrrfip1 | chr1 | Lrrfip1 | 0.405592706 | 0 | 0 | 20352 | 798 |
| chr1\_91108672\_91088634\_+20038-Lrrfip1 | chr1 | Lrrfip1 | 3.650334351 | 0.546927538 | 0.722584089 | 20039 | 858 |
| chr1\_91112297\_91084946\_+27351-Lrrfip1 | chr1 | Lrrfip1 | 0 | 0 | 0.361292045 | 27352 | 1219 |
| chr1\_91112297\_91088634\_+23663-Lrrfip1 | chr1 | Lrrfip1 | 0.101398176 | 0 | 0 | 23664 | 1093 |
| chr1\_91381972\_91376318\_-5654-Ilkap | chr1 | Ilkap | 1.013981764 | 0 | 0 | 5655 | 324 |
| chr1\_92148494\_92029955\_-118539-Hdac4 | chr1 | Hdac4 | 0 | 0.182309179 | 0 | 118540 | 640 |
| chr1\_92148494\_92117471\_-31023-Hdac4 | chr1 | Hdac4 | 0 | 0 | 0.180646022 | 31024 | 31024 |
| chr1\_92148494\_92140159\_-8335-Hdac4 | chr1 | Hdac4 | 0 | 0.182309179 | 0 | 8336 | 8336 |
| chr1\_92152601\_92148256\_-4345-Hdac4 | chr1 | Hdac4 | 0 | 0.09115459 | 0 | 4346 | 4346 |
| chr1\_92470985\_92460380\_-10605-Ndufa10 | chr1 | Ndufa10 | 0 | 0 | 0.361292045 | 10606 | 815 |
| chr1\_93429485\_93412363\_-17122-Hdlbp | chr1 | Hdlbp | 0.202796353 | 0 | 0 | 17123 | 2208 |
| chr1\_93442250\_93437094\_-5156-Hdlbp | chr1 | Hdlbp | 0 | 0.364618359 | 0 | 5157 | 552 |
| chr1\_93500559\_93491157\_+9402-Sept2 | chr1 | Sept2 | 0 | 0 | 0.180646022 | 9403 | 687 |
| chr1\_93576112\_93567417\_+8695-Farp2 | chr1 | Farp2 | 0.405592706 | 0 | 0.903230112 | 8696 | 8696 |
| chr1\_97487800\_97476326\_-11474-na | chr1 | na | 0.202796353 | 0.546927538 | 0 | 11475 | 11475 |
| chr1\_97654689\_97645542\_-9147-D1Ertd622e | chr1 | D1Ertd622e | 0.811185411 | 0.911545897 | 0 | 9148 | 910 |
| chr1\_9889025\_9880332\_+8693-Sgk3 | chr1 | Sgk3 | 0.202796353 | 0 | 0 | 8694 | 763 |
| chr10\_105836220\_105779588\_-56632-Mettl25 | chr10 | Mettl25 | 0.405592706 | 0 | 0.180646022 | 56633 | 1580 |
| chr10\_105836220\_105793340\_-42880-Mettl25 | chr10 | Mettl25 | 0.202796353 | 0 | 0 | 42881 | 1486 |
| chr10\_106988909\_106948656\_-40253-Acss3 | chr10 | Acss3 | 0 | 0 | 0.541938067 | 40254 | 469 |
| chr10\_107004815\_106962962\_-41853-Acss3 | chr10 | Acss3 | 0 | 0.182309179 | 0 | 41854 | 416 |
| chr10\_108243130\_108240105\_+3025-Ppp1r12a | chr10 | Ppp1r12a | 0 | 0 | 0.541938067 | 3026 | 447 |
| chr10\_108249069\_108233999\_+15070-Ppp1r12a | chr10 | Ppp1r12a | 0.202796353 | 0 | 0.180646022 | 15071 | 15071 |
| chr10\_108252924\_108240105\_+12819-Ppp1r12a | chr10 | Ppp1r12a | 0 | 0 | 0.180646022 | 12820 | 1031 |
| chr10\_108261036\_108233999\_+27037-Ppp1r12a | chr10 | Ppp1r12a | 0 | 0.546927538 | 0 | 27038 | 1639 |
| chr10\_108261416\_108248956\_+12460-Ppp1r12a | chr10 | Ppp1r12a | 0.202796353 | 0 | 0 | 12461 | 12461 |
| chr10\_109770324\_109751432\_-18892-Nav3 | chr10 | Nav3 | 0 | 0 | 0.180646022 | 18893 | 2053 |
| chr10\_109883686\_109852505\_-31181-Nav3 | chr10 | Nav3 | 0.202796353 | 0 | 0 | 31182 | 1496 |
| chr10\_11291572\_11289520\_+2052-Fbxo30 | chr10 | Fbxo30 | 0 | 0.182309179 | 0 | 2053 | 2053 |
| chr10\_116549105\_116517317\_-31788-Cnot2 | chr10 | Cnot2 | 0 | 0.182309179 | 0 | 31789 | 491 |
| chr10\_116549175\_116527827\_-21348-Cnot2 | chr10 | Cnot2 | 0 | 0 | 0.180646022 | 21349 | 494 |
| chr10\_117102198\_117099943\_-2255-na | chr10 | na | 0 | 0 | 0.270969033 | 2256 | 2256 |
| chr10\_117361360\_117085032\_-276328-Cpsf6 | chr10 | Cpsf6 | 0.101398176 | 0 | 0 | 276329 | 276329 |
| chr10\_120825136\_120821384\_-3752-na | chr10 | na | 0 | 0.09115459 | 0 | 3753 | 3753 |
| chr10\_120852082\_120825108\_-26974-Msrb3 | chr10 | Msrb3 | 0 | 0 | 0.180646022 | 26975 | 206 |
| chr10\_120852092\_120821384\_-30708-Msrb3 | chr10 | Msrb3 | 0 | 0 | 0.361292045 | 30709 | 30709 |
| chr10\_120852092\_120825108\_-26984-Msrb3 | chr10 | Msrb3 | 1.013981764 | 3.09925605 | 3.793566469 | 26985 | 216 |
| chr10\_120853184\_120825108\_-28076-Msrb3 | chr10 | Msrb3 | 0 | 0 | 0.180646022 | 28077 | 28077 |
| chr10\_121564105\_121551251\_-12854-Tbk1 | chr10 | Tbk1 | 0 | 0.182309179 | 0 | 12855 | 1932 |
| chr10\_123133129\_123119109\_-14020-Usp15 | chr10 | Usp15 | 0 | 0 | 0.180646022 | 14021 | 1848 |
| chr10\_123153127\_123146794\_-6333-Usp15 | chr10 | Usp15 | 0 | 0 | 0.090323011 | 6334 | 232 |
| chr10\_123181800\_123153041\_-28759-Usp15 | chr10 | Usp15 | 0 | 0 | 0.180646022 | 28760 | 681 |
| chr10\_12442093\_12436281\_-5812-Utrn | chr10 | Utrn | 0 | 0 | 0.361292045 | 5813 | 437 |
| chr10\_12621380\_12621191\_-189-Utrn | chr10 | Utrn | 0.202796353 | 0 | 0 | 190 | 190 |
| chr10\_12643611\_12633944\_-9667-Utrn | chr10 | Utrn | 0.202796353 | 0 | 0 | 9668 | 688 |
| chr10\_12654834\_12649143\_-5691-Utrn | chr10 | Utrn | 0.202796353 | 0 | 0 | 5692 | 362 |
| chr10\_12688427\_12475271\_-213156-Utrn | chr10 | Utrn | 0 | 0 | 0.180646022 | 213157 | 4802 |
| chr10\_12688427\_12621191\_-67236-Utrn | chr10 | Utrn | 0.811185411 | 0.182309179 | 0 | 67237 | 3786 |
| chr10\_127278408\_127274714\_+3694-Dctn2 | chr10 | Dctn2 | 0 | 0 | 0.180646022 | 3695 | 1017 |
| chr10\_12727912\_12713254\_-14658-Utrn | chr10 | Utrn | 0.202796353 | 0 | 0 | 14659 | 985 |
| chr10\_127305857\_127299949\_-5908-Mars | chr10 | Mars | 1.013981764 | 0.546927538 | 0.180646022 | 5909 | 983 |
| chr10\_127305857\_127304185\_-1672-Mars | chr10 | Mars | 0.202796353 | 0.182309179 | 0 | 1673 | 523 |
| chr10\_127648189\_127646891\_+1298-Stat6 | chr10 | Stat6 | 0 | 0 | 0.180646022 | 1299 | 360 |
| chr10\_14011215\_14004201\_+7014-Hivep2 | chr10 | Hivep2 | 0 | 0.182309179 | 0 | 7015 | 7015 |
| chr10\_17916032\_17908034\_-7998-Heca | chr10 | Heca | 0 | 0.182309179 | 0 | 7999 | 1196 |
| chr10\_18096336\_18092845\_+3491-Reps1 | chr10 | Reps1 | 0 | 0 | 0.361292045 | 3492 | 858 |
| chr10\_20029203\_20023608\_+5595-Map3k5 | chr10 | Map3k5 | 0.608389058 | 0.182309179 | 0 | 5596 | 641 |
| chr10\_20046484\_20024885\_+21599-Map3k5 | chr10 | Map3k5 | 0 | 0 | 0.361292045 | 21600 | 560 |
| chr10\_20059090\_20019558\_+39532-Map3k5 | chr10 | Map3k5 | 0.202796353 | 0 | 0 | 39533 | 1092 |
| chr10\_20100197\_20023608\_+76589-Map3k5 | chr10 | Map3k5 | 0.405592706 | 0 | 0 | 76590 | 1803 |
| chr10\_21358840\_21336967\_+21873-Hbs1l | chr10 | Hbs1l | 0.202796353 | 0 | 0 | 21874 | 1373 |
| chr10\_22307298\_22285691\_+21607-H60b | chr10 | H60b | 0 | 0.364618359 | 0 | 21608 | 21608 |
| chr10\_22665706\_22664363\_+1343-Slc2a12 | chr10 | Slc2a12 | 0.608389058 | 0 | 0.361292045 | 1344 | 1344 |
| chr10\_22694126\_22664363\_+29763-Slc2a12 | chr10 | Slc2a12 | 0 | 0.364618359 | 0 | 29764 | 1600 |
| chr10\_25443954\_25441573\_+2381-Epb41l2 | chr10 | Epb41l2 | 0.202796353 | 0 | 0 | 2382 | 698 |
| chr10\_25502387\_25441573\_+60814-Epb41l2 | chr10 | Epb41l2 | 0 | 0 | 0.180646022 | 60815 | 5347 |
| chr10\_26352375\_26313847\_-38528-L3mbtl3 | chr10 | L3mbtl3 | 0.202796353 | 0 | 0 | 38529 | 1608 |
| chr10\_26352375\_26336233\_-16142-L3mbtl3 | chr10 | L3mbtl3 | 0.202796353 | 0 | 0 | 16143 | 954 |
| chr10\_27139005\_27118479\_-20526-Lama2 | chr10 | Lama2 | 0 | 0.182309179 | 0 | 20527 | 728 |
| chr10\_27459406\_27118479\_-340927-Lama2 | chr10 | Lama2 | 0 | 0.182309179 | 0 | 340928 | 5162 |
| chr10\_27467374\_27422472\_-44902-Lama2 | chr10 | Lama2 | 0 | 0 | 0.180646022 | 44903 | 527 |
| chr10\_33139283\_33139074\_+209-Trdn | chr10 | Trdn | 0.405592706 | 0.182309179 | 0 | 210 | 210 |
| chr10\_33158278\_33139074\_+19204-Trdn | chr10 | Trdn | 0.202796353 | 0 | 0 | 19205 | 405 |
| chr10\_33200222\_33139074\_+61148-Trdn | chr10 | Trdn | 0 | 0 | 0.541938067 | 61149 | 825 |
| chr10\_33321334\_33139074\_+182260-Trdn | chr10 | Trdn | 0 | 0.182309179 | 0 | 182261 | 1098 |
| chr10\_34012137\_34008993\_-3144-Rwdd1 | chr10 | Rwdd1 | 0.405592706 | 0 | 0 | 3145 | 197 |
| chr10\_39814090\_39805600\_+8490-Rev3l | chr10 | Rev3l | 0 | 0 | 0.180646022 | 8491 | 462 |
| chr10\_39852073\_39805600\_+46473-Rev3l | chr10 | Rev3l | 0 | 0 | 0.180646022 | 46474 | 7590 |
| chr10\_40080807\_40076564\_-4243-Slc16a10 | chr10 | Slc16a10 | 0 | 0.364618359 | 0 | 4244 | 599 |
| chr10\_41647149\_41633968\_-13181-Ccdc162 | chr10 | Ccdc162 | 0 | 0.182309179 | 0 | 13182 | 873 |
| chr10\_41666796\_41644571\_-22225-Ccdc162 | chr10 | Ccdc162 | 0 | 0 | 0.180646022 | 22226 | 1008 |
| chr10\_42438405\_42415549\_-22856-Lace1 | chr10 | Lace1 | 0 | 0.182309179 | 0 | 22857 | 385 |
| chr10\_43074688\_43066711\_-7977-Sobp | chr10 | Sobp | 0.202796353 | 0.273463769 | 0 | 7978 | 7978 |
| chr10\_43160844\_43074593\_-86251-Sobp | chr10 | Sobp | 0 | 0.182309179 | 0 | 86252 | 573 |
| chr10\_43160844\_43127779\_-33065-Sobp | chr10 | Sobp | 1.216778117 | 0.911545897 | 1.445168179 | 33066 | 477 |
| chr10\_43413547\_43393871\_+19676-na | chr10 | na | 0 | 0 | 0.180646022 | 19677 | 19677 |
| chr10\_43936091\_43921387\_+14704-Rtn4ip1 | chr10 | Rtn4ip1 | 0 | 0 | 0.180646022 | 14705 | 463 |
| chr10\_43992705\_43975027\_-17678-Aim1 | chr10 | Aim1 | 0 | 0.182309179 | 0 | 17679 | 788 |
| chr10\_45618629\_45588380\_+30249-Hace1 | chr10 | Hace1 | 0.202796353 | 0 | 0 | 30250 | 458 |
| chr10\_4783973\_3463389\_+1320584-Mthfd1l | chr10 | Mthfd1l | 0 | 0 | 0.361292045 | 1320585 | 1320585 |
| chr10\_49535499\_49523682\_-11817-Grik2 | chr10 | Grik2 | 0 | 0.182309179 | 0 | 11818 | 410 |
| chr10\_50767507\_50690115\_+77392-Ascc3 | chr10 | Ascc3 | 0 | 0.182309179 | 0 | 77393 | 3399 |
| chr10\_50767507\_50767091\_+416-Ascc3 | chr10 | Ascc3 | 0 | 0 | 0.361292045 | 417 | 247 |
| chr10\_5124963\_5075789\_-49174-Syne1 | chr10 | Syne1 | 0 | 0.364618359 | 0 | 49175 | 2748 |
| chr10\_5222007\_5146253\_-75754-Syne1 | chr10 | Syne1 | 0 | 0 | 0.180646022 | 75755 | 4276 |
| chr10\_52290923\_52261727\_+29196-Dcbld1 | chr10 | Dcbld1 | 0 | 0.182309179 | 0 | 29197 | 473 |
| chr10\_5250994\_5116967\_-134027-Syne1 | chr10 | Syne1 | 0 | 0.182309179 | 0 | 134028 | 10740 |
| chr10\_56051458\_56040139\_-11319-Tbc1d32 | chr10 | Tbc1d32 | 0 | 0.182309179 | 0 | 11320 | 482 |
| chr10\_56151853\_56123511\_-28342-Tbc1d32 | chr10 | Tbc1d32 | 0 | 0 | 0.361292045 | 28343 | 413 |
| chr10\_56195500\_56177492\_-18008-Tbc1d32 | chr10 | Tbc1d32 | 0.202796353 | 0 | 0 | 18009 | 530 |
| chr10\_57512079\_57495898\_+16181-Hsf2 | chr10 | Hsf2 | 0 | 0 | 0.180646022 | 16182 | 1396 |
| chr10\_58457784\_58451984\_+5800-Ranbp2 | chr10 | Ranbp2 | 0.202796353 | 0 | 0 | 5801 | 903 |
| chr10\_58485881\_58463819\_+22062-Ranbp2 | chr10 | Ranbp2 | 0 | 0.182309179 | 0 | 22063 | 6726 |
| chr10\_59104491\_59083448\_+21043-Sh3rf3 | chr10 | Sh3rf3 | 0 | 0 | 0.180646022 | 21044 | 748 |
| chr10\_60013774\_60004795\_+8979-Ascc1 | chr10 | Ascc1 | 0 | 0.364618359 | 0 | 8980 | 510 |
| chr10\_62365068\_62281033\_-84035-Hk1 | chr10 | Hk1 | 0 | 0.182309179 | 0 | 84036 | 2296 |
| chr10\_62751016\_62746901\_-4115-Ccar1 | chr10 | Ccar1 | 0 | 0.364618359 | 0 | 4116 | 534 |
| chr10\_62772065\_62770855\_-1210-Ccar1 | chr10 | Ccar1 | 0.202796353 | 0 | 0 | 1211 | 292 |
| chr10\_62791042\_62780441\_-10601-Ccar1 | chr10 | Ccar1 | 0 | 0.182309179 | 0 | 10602 | 558 |
| chr10\_63017610\_63015802\_-1808-Hnrnph3 | chr10 | Hnrnph3 | 0 | 0 | 0.361292045 | 1809 | 528 |
| chr10\_63117026\_63116720\_-306-na | chr10 | na | 0 | 0 | 0.361292045 | 307 | 307 |
| chr10\_63123397\_63120029\_-3368-Mypn | chr10 | Mypn | 0.202796353 | 0 | 0 | 3369 | 501 |
| chr10\_63136295\_63116720\_-19575-Mypn | chr10 | Mypn | 0 | 0.729236718 | 0 | 19576 | 2121 |
| chr10\_63136295\_63130983\_-5312-Mypn | chr10 | Mypn | 0.202796353 | 0 | 0 | 5313 | 949 |
| chr10\_63146208\_63118421\_-27787-Mypn | chr10 | Mypn | 0 | 0 | 0.180646022 | 27788 | 2187 |
| chr10\_63146208\_63125669\_-20539-Mypn | chr10 | Mypn | 0 | 0.364618359 | 0 | 20540 | 1552 |
| chr10\_63169430\_63152795\_-16635-Mypn | chr10 | Mypn | 0 | 0 | 0.361292045 | 16636 | 554 |
| chr10\_63169430\_63162222\_-7208-Mypn | chr10 | Mypn | 1.013981764 | 1.640782614 | 1.264522156 | 7209 | 412 |
| chr10\_63169430\_63163513\_-5917-Mypn | chr10 | Mypn | 2.433556234 | 1.276164256 | 0.722584089 | 5918 | 340 |
| chr10\_63307909\_63299120\_+8789-Herc4 | chr10 | Herc4 | 0 | 0 | 0.180646022 | 8790 | 411 |
| chr10\_64409283\_64250698\_+158585-Ctnna3 | chr10 | Ctnna3 | 0 | 0.182309179 | 0 | 158586 | 327 |
| chr10\_64675916\_64250698\_+425218-Ctnna3 | chr10 | Ctnna3 | 0 | 0 | 0.180646022 | 425219 | 837 |
| chr10\_67248150\_67216983\_+31167-Jmjd1c | chr10 | Jmjd1c | 0 | 0.364618359 | 0 | 31168 | 6647 |
| chr10\_68043261\_68035789\_+7472-Rtkn2 | chr10 | Rtkn2 | 0 | 0 | 0.180646022 | 7473 | 2154 |
| chr10\_70154836\_70142579\_+12257-Ccdc6 | chr10 | Ccdc6 | 0 | 0.364618359 | 0.180646022 | 12258 | 279 |
| chr10\_70167034\_70154741\_-12293-na | chr10 | na | 0.101398176 | 0 | 0 | 12294 | 12294 |
| chr10\_70175167\_70154708\_+20459-Ccdc6 | chr10 | Ccdc6 | 0.202796353 | 0 | 0 | 20460 | 551 |
| chr10\_71381760\_71376705\_+5055-Ipmk | chr10 | Ipmk | 0.202796353 | 0 | 0 | 5056 | 638 |
| chr10\_75261957\_75245079\_+16878-Specc1l | chr10 | Specc1l | 1.216778117 | 2.005400973 | 0.722584089 | 16879 | 2256 |
| chr10\_75263370\_75248437\_+14933-Specc1l | chr10 | Specc1l | 0.202796353 | 0 | 0 | 14934 | 714 |
| chr10\_75267589\_75245079\_+22510-Specc1l | chr10 | Specc1l | 0.405592706 | 0 | 0 | 22511 | 2439 |
| chr10\_75279961\_75245079\_+34882-Specc1l | chr10 | Specc1l | 0.202796353 | 0 | 0.361292045 | 34883 | 2783 |
| chr10\_75279961\_75257868\_+22093-Specc1l | chr10 | Specc1l | 0.202796353 | 0 | 0 | 22094 | 941 |
| chr10\_75279961\_75263279\_+16682-Specc1l | chr10 | Specc1l | 0 | 0 | 0.180646022 | 16683 | 527 |
| chr10\_75916911\_75910154\_-6757-Smarcb1 | chr10 | Smarcb1 | 0.202796353 | 0 | 0 | 6758 | 535 |
| chr10\_76370079\_76367308\_-2771-Pcnt | chr10 | Pcnt | 0 | 0.546927538 | 0 | 2772 | 522 |
| chr10\_76393039\_76379905\_-13134-Pcnt | chr10 | Pcnt | 0 | 0 | 0.541938067 | 13135 | 2751 |
| chr10\_76404651\_76399856\_-4795-Pcnt | chr10 | Pcnt | 0 | 0.546927538 | 0 | 4796 | 743 |
| chr10\_7640815\_7640045\_-770-Pcmt1 | chr10 | Pcmt1 | 0 | 0.364618359 | 0 | 771 | 207 |
| chr10\_76412649\_76387427\_-25222-Pcnt | chr10 | Pcnt | 0 | 0 | 0.180646022 | 25223 | 3319 |
| chr10\_76412649\_76399856\_-12793-Pcnt | chr10 | Pcnt | 0.202796353 | 0 | 0.180646022 | 12794 | 1689 |
| chr10\_76412649\_76408698\_-3951-Pcnt | chr10 | Pcnt | 0.202796353 | 0 | 0 | 3952 | 913 |
| chr10\_7703120\_7691335\_+11785-Lats1 | chr10 | Lats1 | 0.202796353 | 0 | 0 | 11786 | 2139 |
| chr10\_7703120\_7701610\_+1510-Lats1 | chr10 | Lats1 | 0 | 0.182309179 | 0 | 1511 | 1511 |
| chr10\_77096535\_77085267\_-11268-Col18a1 | chr10 | Col18a1 | 0.202796353 | 0 | 0 | 11269 | 816 |
| chr10\_77322583\_77302559\_-20024-Adarb1 | chr10 | Adarb1 | 0.405592706 | 0 | 0.451615056 | 20025 | 20025 |
| chr10\_78204392\_78200618\_-3774-Trappc10 | chr10 | Trappc10 | 0 | 0.364618359 | 0 | 3775 | 1043 |
| chr10\_78204392\_78202880\_-1512-Trappc10 | chr10 | Trappc10 | 0.608389058 | 0 | 0 | 1513 | 654 |
| chr10\_78211622\_78210378\_-1244-Trappc10 | chr10 | Trappc10 | 0 | 0 | 0.361292045 | 1245 | 339 |
| chr10\_7924872\_7919114\_-5758-Tab2 | chr10 | Tab2 | 0 | 0.364618359 | 0 | 5759 | 1689 |
| chr10\_79710920\_79709671\_+1249-Bsg | chr10 | Bsg | 0 | 0 | 0.180646022 | 1250 | 666 |
| chr10\_79862047\_79860824\_+1223-Ptbp1 | chr10 | Ptbp1 | 2.636352587 | 0 | 0 | 1224 | 180 |
| chr10\_81181625\_81175953\_+5672-Eef2 | chr10 | Eef2 | 0 | 0 | 0.180646022 | 5673 | 5673 |
| chr10\_82761913\_82751384\_-10529-Nfyb | chr10 | Nfyb | 0 | 0 | 0.180646022 | 10530 | 586 |
| chr10\_82863640\_82863015\_+625-na | chr10 | na | 0 | 0 | 0.361292045 | 626 | 626 |
| chr10\_83191784\_83191635\_-149-na | chr10 | na | 0 | 0.182309179 | 0 | 150 | 150 |
| chr10\_84673528\_84655945\_+17583-Polr3b | chr10 | Polr3b | 0.202796353 | 0 | 0 | 17584 | 498 |
| chr10\_84674719\_84667322\_+7397-Polr3b | chr10 | Polr3b | 0 | 0 | 0.361292045 | 7398 | 526 |
| chr10\_84680464\_84667322\_+13142-Polr3b | chr10 | Polr3b | 0 | 0 | 0.541938067 | 13143 | 854 |
| chr10\_84684304\_84655945\_+28359-Polr3b | chr10 | Polr3b | 0 | 0 | 0.180646022 | 28360 | 1117 |
| chr10\_84699541\_84667344\_+32197-Polr3b | chr10 | Polr3b | 0 | 0 | 0.180646022 | 32198 | 1590 |
| chr10\_84713365\_84655945\_+57420-Polr3b | chr10 | Polr3b | 0.202796353 | 0 | 0 | 57421 | 57421 |
| chr10\_85009627\_85001782\_+7845-Ric8b | chr10 | Ric8b | 0 | 0.182309179 | 0 | 7846 | 517 |
| chr10\_85009627\_85008657\_+970-Ric8b | chr10 | Ric8b | 0 | 0.182309179 | 0 | 971 | 313 |
| chr10\_85133896\_85133591\_+305-na | chr10 | na | 0 | 0.182309179 | 0 | 306 | 306 |
| chr10\_86731266\_86724198\_+7068-Ttc41 | chr10 | Ttc41 | 0 | 0.182309179 | 0 | 7069 | 812 |
| chr10\_86736999\_86729782\_+7217-Ttc41 | chr10 | Ttc41 | 0 | 0.364618359 | 0 | 7218 | 1036 |
| chr10\_88419560\_88400652\_+18908-Gnptab | chr10 | Gnptab | 0.202796353 | 0 | 0.180646022 | 18909 | 654 |
| chr10\_88582048\_88566508\_-15540-na | chr10 | na | 0 | 0 | 0.090323011 | 15541 | 15541 |
| chr10\_88819349\_88795377\_-23972-Utp20 | chr10 | Utp20 | 0 | 0.182309179 | 0 | 23973 | 2226 |
| chr10\_89535546\_89498049\_-37497-Nr1h4 | chr10 | Nr1h4 | 0 | 0 | 0.180646022 | 37498 | 37498 |
| chr10\_89535546\_89530901\_-4645-Nr1h4 | chr10 | Nr1h4 | 0 | 0.273463769 | 0 | 4646 | 4646 |
| chr10\_89653056\_89646759\_-6297-Scyl2 | chr10 | Scyl2 | 0 | 0 | 0.361292045 | 6298 | 467 |
| chr10\_89816221\_89812044\_+4177-Uhrf1bp1l | chr10 | Uhrf1bp1l | 0 | 0 | 0.180646022 | 4178 | 291 |
| chr10\_92878612\_92868723\_-9889-Cfap54 | chr10 | Cfap54 | 0 | 0 | 0.541938067 | 9890 | 591 |
| chr10\_93265680\_93264880\_-800-Elk3 | chr10 | Elk3 | 0 | 0 | 0.903230112 | 801 | 801 |
| chr10\_93868961\_93862377\_-6584-Metap2 | chr10 | Metap2 | 0.202796353 | 0 | 0 | 6585 | 412 |
| chr10\_93984493\_93969089\_-15404-Vezt | chr10 | Vezt | 0 | 0 | 0.361292045 | 15405 | 5356 |
| chr10\_94167728\_94165418\_+2310-Nr2c1 | chr10 | Nr2c1 | 0.202796353 | 0 | 0 | 2311 | 419 |
| chr10\_94582409\_94578423\_+3986-Tmcc3 | chr10 | Tmcc3 | 0 | 0.182309179 | 0 | 3987 | 1053 |
| chr10\_94766517\_94725647\_+40870-Cep83 | chr10 | Cep83 | 0 | 0.182309179 | 0 | 40871 | 1095 |
| chr10\_95709706\_95709592\_+114-na | chr10 | na | 0.202796353 | 0 | 0 | 115 | 115 |
| chr10\_9812407\_9798122\_-14285-Stxbp5 | chr10 | Stxbp5 | 0 | 0 | 0.180646022 | 14286 | 935 |
| chr10\_9868753\_9841871\_-26882-Stxbp5 | chr10 | Stxbp5 | 0 | 0 | 0.180646022 | 26883 | 26883 |
| chr11\_101044623\_101026660\_+17963-Atp6v0a1 | chr11 | Atp6v0a1 | 0 | 0.182309179 | 0.180646022 | 17964 | 1605 |
| chr11\_102005440\_102004635\_-805-Mpp3 | chr11 | Mpp3 | 0 | 0 | 0.180646022 | 806 | 806 |
| chr11\_102538356\_102500803\_-37553-Gpatch8 | chr11 | Gpatch8 | 0.202796353 | 0 | 0 | 37554 | 13325 |
| chr11\_103056499\_103046379\_+10120-Nmt1 | chr11 | Nmt1 | 0.405592706 | 0 | 0 | 10121 | 473 |
| chr11\_103060248\_103052206\_+8042-Nmt1 | chr11 | Nmt1 | 0 | 0.182309179 | 0 | 8043 | 779 |
| chr11\_104425293\_104423922\_-1371-Kansl1 | chr11 | Kansl1 | 0 | 0.182309179 | 0.180646022 | 1372 | 1372 |
| chr11\_104426468\_104368680\_-57788-Kansl1 | chr11 | Kansl1 | 0 | 0.182309179 | 0 | 57789 | 1658 |
| chr11\_104426468\_104423922\_-2546-Kansl1 | chr11 | Kansl1 | 1.825167175 | 2.91694687 | 1.083876134 | 2547 | 1417 |
| chr11\_105247595\_105240361\_+7234-Tlk2 | chr11 | Tlk2 | 0 | 0.182309179 | 0.180646022 | 7235 | 437 |
| chr11\_106123906\_106096991\_+26915-Map3k3 | chr11 | Map3k3 | 0.811185411 | 0.364618359 | 0 | 26916 | 498 |
| chr11\_106224934\_106224081\_+853-Ddx42 | chr11 | Ddx42 | 0 | 0.182309179 | 0 | 854 | 389 |
| chr11\_106337233\_106329997\_-7236-Scn4a | chr11 | Scn4a | 0 | 0 | 0.541938067 | 7237 | 1008 |
| chr11\_106342520\_106341422\_-1098-Scn4a | chr11 | Scn4a | 0.202796353 | 0.182309179 | 0 | 1099 | 364 |
| chr11\_106345729\_106339154\_-6575-Scn4a | chr11 | Scn4a | 0.202796353 | 0.911545897 | 0.541938067 | 6576 | 1124 |
| chr11\_106349791\_106342311\_-7480-Scn4a | chr11 | Scn4a | 0.202796353 | 0 | 0 | 7481 | 1836 |
| chr11\_106520014\_106506867\_-13147-Tex2 | chr11 | Tex2 | 0 | 0.364618359 | 0 | 13148 | 590 |
| chr11\_106685248\_106679549\_-5699-Pecam1 | chr11 | Pecam1 | 0.202796353 | 0 | 0 | 5700 | 615 |
| chr11\_106775600\_106772652\_-2948-Polg2 | chr11 | Polg2 | 0 | 0 | 0.180646022 | 2949 | 497 |
| chr11\_106828624\_106823020\_-5604-Smurf2 | chr11 | Smurf2 | 0 | 0.182309179 | 0 | 5605 | 399 |
| chr11\_106852649\_106845983\_-6666-Smurf2 | chr11 | Smurf2 | 0 | 0.182309179 | 0 | 6667 | 447 |
| chr11\_107111635\_107110813\_-822-Bptf | chr11 | Bptf | 0 | 0.182309179 | 0 | 823 | 823 |
| chr11\_107555575\_106224081\_+1331494-Cep95 | chr11 | Cep95 | 0.202796353 | 0 | 0 | 1331495 | 1331495 |
| chr11\_107577899\_107574938\_+2961-Helz | chr11 | Helz | 0.202796353 | 0 | 0 | 2962 | 265 |
| chr11\_107602508\_107592706\_+9802-Helz | chr11 | Helz | 0 | 0 | 0.180646022 | 9803 | 509 |
| chr11\_107604363\_107592706\_+11657-Helz | chr11 | Helz | 0.608389058 | 0.546927538 | 1.445168179 | 11658 | 915 |
| chr11\_107614118\_107592706\_+21412-Helz | chr11 | Helz | 0.405592706 | 0 | 0 | 21413 | 1183 |
| chr11\_107620214\_107592706\_+27508-Helz | chr11 | Helz | 0 | 0.911545897 | 0.903230112 | 27509 | 1648 |
| chr11\_107620214\_107618983\_+1231-Helz | chr11 | Helz | 0.202796353 | 0 | 0 | 1232 | 465 |
| chr11\_107632350\_107620084\_+12266-Helz | chr11 | Helz | 0 | 0 | 0.180646022 | 12267 | 595 |
| chr11\_107649340\_107632172\_+17168-Helz | chr11 | Helz | 0 | 0 | 0.361292045 | 17169 | 1005 |
| chr11\_107986385\_107961573\_-24812-Prkca | chr11 | Prkca | 0.202796353 | 0 | 0 | 24813 | 687 |
| chr11\_108057873\_108012627\_-45246-Prkca | chr11 | Prkca | 0 | 0 | 0.180646022 | 45247 | 630 |
| chr11\_108178607\_108178441\_-166-na | chr11 | na | 0 | 0.182309179 | 0 | 167 | 167 |
| chr11\_110310305\_110292086\_-18219-Abca5 | chr11 | Abca5 | 0 | 0 | 0.180646022 | 18220 | 1893 |
| chr11\_110310305\_110301731\_-8574-Abca5 | chr11 | Abca5 | 0 | 0.364618359 | 0 | 8575 | 865 |
| chr11\_110496466\_110490145\_+6321-Map2k6 | chr11 | Map2k6 | 0 | 0 | 0.541938067 | 6322 | 580 |
| chr11\_114902614\_114870672\_+31942-Cd300a | chr11 | Cd300a | 0.202796353 | 0 | 0 | 31943 | 31943 |
| chr11\_115786312\_115785440\_+872-Tmem94 | chr11 | Tmem94 | 0.202796353 | 0 | 0 | 873 | 385 |
| chr11\_115927434\_115925407\_-2027-Recql5 | chr11 | Recql5 | 0 | 0.546927538 | 0 | 2028 | 218 |
| chr11\_115957963\_115957361\_+602-Sap30bp | chr11 | Sap30bp | 0.202796353 | 0 | 0 | 603 | 603 |
| chr11\_116050804\_116047677\_+3127-Unk | chr11 | Unk | 0.202796353 | 0 | 0 | 3128 | 772 |
| chr11\_116160110\_116154707\_-5403-Fbf1 | chr11 | Fbf1 | 0 | 0.182309179 | 0 | 5404 | 1075 |
| chr11\_116183624\_116180943\_-2681-Acox1 | chr11 | Acox1 | 0 | 0.182309179 | 0 | 2682 | 389 |
| chr11\_116189575\_116189025\_-550-Acox1 | chr11 | Acox1 | 0.608389058 | 0.182309179 | 0 | 551 | 551 |
| chr11\_117150738\_117077108\_+73630-Sec14l1 | chr11 | Sec14l1 | 0.202796353 | 0 | 0 | 73631 | 73631 |
| chr11\_117150738\_117149146\_+1592-Sec14l1 | chr11 | Sec14l1 | 0 | 0.364618359 | 0 | 1593 | 378 |
| chr11\_11761353\_11748311\_+13042-Ikzf1 | chr11 | Ikzf1 | 0 | 0 | 0.180646022 | 13043 | 687 |
| chr11\_119154075\_119151028\_-3047-Tbc1d16 | chr11 | Tbc1d16 | 0.405592706 | 0.546927538 | 0 | 3048 | 367 |
| chr11\_119468080\_119452511\_+15569-Rnf213 | chr11 | Rnf213 | 0.202796353 | 0 | 0.180646022 | 15570 | 2323 |
| chr11\_119468153\_119452511\_+15642-Rnf213 | chr11 | Rnf213 | 0 | 0.182309179 | 0 | 15643 | 15643 |
| chr11\_120134882\_120128423\_-6459-Slc38a10 | chr11 | Slc38a10 | 0 | 0.182309179 | 0 | 6460 | 505 |
| chr11\_120141645\_120128423\_-13222-Slc38a10 | chr11 | Slc38a10 | 0.202796353 | 0 | 0 | 13223 | 914 |
| chr11\_120416380\_120409612\_-6768-Nploc4 | chr11 | Nploc4 | 0.202796353 | 0 | 0 | 6769 | 463 |
| chr11\_120416380\_120413560\_-2820-Nploc4 | chr11 | Nploc4 | 0 | 0 | 0.180646022 | 2821 | 304 |
| chr11\_120689341\_120678420\_+10921-Aspscr1 | chr11 | Aspscr1 | 0.202796353 | 0 | 0 | 10922 | 663 |
| chr11\_120973969\_120967995\_-5974-Csnk1d | chr11 | Csnk1d | 0 | 0 | 0.541938067 | 5975 | 1010 |
| chr11\_121219923\_121207639\_+12284-Hexdc | chr11 | Hexdc | 0.405592706 | 0 | 0 | 12285 | 1035 |
| chr11\_16883613\_16881464\_+2149-Egfr | chr11 | Egfr | 0.202796353 | 0 | 0 | 2150 | 249 |
| chr11\_20094445\_20077188\_-17257-Actr2 | chr11 | Actr2 | 0 | 0.182309179 | 0 | 17258 | 722 |
| chr11\_20712315\_20703711\_-8604-Aftph | chr11 | Aftph | 0.405592706 | 0 | 0 | 8605 | 459 |
| chr11\_21268863\_21260288\_+8575-na | chr11 | na | 0 | 0 | 0.180646022 | 8576 | 8576 |
| chr11\_21333810\_20741306\_-592504-Ugp2 | chr11 | Ugp2 | 0 | 0.182309179 | 0 | 592505 | 592505 |
| chr11\_22062887\_22053432\_-9455-Ehbp1 | chr11 | Ehbp1 | 0 | 0.182309179 | 0 | 9456 | 603 |
| chr11\_23364512\_23343320\_+21192-Usp34 | chr11 | Usp34 | 0.405592706 | 0 | 0 | 21193 | 1844 |
| chr11\_23421366\_23382554\_+38812-Usp34 | chr11 | Usp34 | 0 | 0.182309179 | 0.180646022 | 38813 | 2265 |
| chr11\_23426795\_23420040\_+6755-Usp34 | chr11 | Usp34 | 0 | 0 | 0.180646022 | 6756 | 630 |
| chr11\_23484181\_23464217\_+19964-Usp34 | chr11 | Usp34 | 0 | 0 | 0.180646022 | 19965 | 1541 |
| chr11\_26550075\_26534211\_-15864-na | chr11 | na | 0 | 0 | 0.090323011 | 15865 | 15865 |
| chr11\_28505430\_28434081\_-71349-Ccdc85a | chr11 | Ccdc85a | 0 | 0.364618359 | 0 | 71350 | 71350 |
| chr11\_29205704\_29198793\_+6911-Smek2 | chr11 | Smek2 | 0 | 0.364618359 | 0 | 6912 | 436 |
| chr11\_29530692\_29529929\_+763-Mtif2 | chr11 | Mtif2 | 0.202796353 | 0 | 0 | 764 | 338 |
| chr11\_29535266\_29533226\_+2040-Mtif2 | chr11 | Mtif2 | 0.202796353 | 0 | 0 | 2041 | 510 |
| chr11\_30219772\_30219579\_-193-Sptbn1 | chr11 | Sptbn1 | 0.202796353 | 0 | 0 | 194 | 194 |
| chr11\_30812164\_30791092\_+21072-Psme4 | chr11 | Psme4 | 0.202796353 | 0 | 0 | 21073 | 1261 |
| chr11\_30998521\_30856030\_+142491-Psme4 | chr11 | Psme4 | 0 | 0.182309179 | 0 | 142492 | 142492 |
| chr11\_31058999\_31055458\_+3541-Asb3 | chr11 | Asb3 | 0 | 0.546927538 | 0 | 3542 | 427 |
| chr11\_31061586\_31055458\_+6128-Asb3 | chr11 | Asb3 | 0 | 2.187710153 | 0.722584089 | 6129 | 625 |
| chr11\_31104474\_31081362\_+23112-Asb3 | chr11 | Asb3 | 0.202796353 | 0 | 0 | 23113 | 23113 |
| chr11\_31708256\_31699872\_-8384-na | chr11 | na | 0 | 0 | 0.180646022 | 8385 | 8385 |
| chr11\_3221294\_3220244\_+1050-Eif4enif1 | chr11 | Eif4enif1 | 0 | 0 | 0.180646022 | 1051 | 489 |
| chr11\_3254642\_3252160\_-2482-Drg1 | chr11 | Drg1 | 0 | 0 | 0.180646022 | 2483 | 422 |
| chr11\_35570731\_35508223\_+62508-Slit3 | chr11 | Slit3 | 0 | 0 | 0.180646022 | 62509 | 380 |
| chr11\_35651819\_35632712\_+19107-Slit3 | chr11 | Slit3 | 0 | 0.182309179 | 0 | 19108 | 510 |
| chr11\_43705477\_43699279\_+6198-Pwwp2a | chr11 | Pwwp2a | 0.405592706 | 0 | 0 | 6199 | 1123 |
| chr11\_43705567\_43704534\_+1033-Pwwp2a | chr11 | Pwwp2a | 0 | 0.364618359 | 0 | 1034 | 1034 |
| chr11\_43706216\_43704534\_+1682-Pwwp2a | chr11 | Pwwp2a | 0 | 0.182309179 | 0 | 1683 | 1683 |
| chr11\_43706294\_43704534\_+1760-Pwwp2a | chr11 | Pwwp2a | 0 | 0 | 0.180646022 | 1761 | 1761 |
| chr11\_43721963\_43686357\_+35606-Pwwp2a | chr11 | Pwwp2a | 0.202796353 | 0 | 0 | 35607 | 35607 |
| chr11\_43721963\_43704534\_+17429-Pwwp2a | chr11 | Pwwp2a | 0 | 0 | 0.361292045 | 17430 | 3498 |
| chr11\_4531305\_4517741\_-13564-Mtmr3 | chr11 | Mtmr3 | 0.608389058 | 0.546927538 | 0 | 13565 | 541 |
| chr11\_4546268\_4517741\_-28527-Mtmr3 | chr11 | Mtmr3 | 0 | 0 | 0.180646022 | 28528 | 621 |
| chr11\_45895129\_45883710\_+11419-Clint1 | chr11 | Clint1 | 0 | 0.364618359 | 0 | 11420 | 971 |
| chr11\_46977822\_46977668\_+154-na | chr11 | na | 0.405592706 | 0 | 0.361292045 | 155 | 155 |
| chr11\_47195132\_47195031\_-101-Sgcd | chr11 | Sgcd | 0.202796353 | 0 | 0.090323011 | 102 | 102 |
| chr11\_4806336\_4780578\_-25758-na | chr11 | na | 0 | 0 | 0.180646022 | 25759 | 25759 |
| chr11\_4806336\_4799861\_-6475-Nf2 | chr11 | Nf2 | 0 | 0 | 0.180646022 | 6476 | 294 |
| chr11\_4818627\_4803678\_-14949-Nf2 | chr11 | Nf2 | 0 | 0 | 0.361292045 | 14950 | 435 |
| chr11\_4820493\_4803678\_-16815-Nf2 | chr11 | Nf2 | 0 | 0.182309179 | 0 | 16816 | 561 |
| chr11\_4820493\_4808257\_-12236-Nf2 | chr11 | Nf2 | 0.304194529 | 0 | 0.541938067 | 12237 | 402 |
| chr11\_49215945\_49212695\_+3250-Zfp62 | chr11 | Zfp62 | 0 | 0.182309179 | 0 | 3251 | 2029 |
| chr11\_49819254\_49809034\_+10220-Gfpt2 | chr11 | Gfpt2 | 0 | 0 | 0.361292045 | 10221 | 580 |
| chr11\_50267010\_50263250\_-3760-Maml1 | chr11 | Maml1 | 0.405592706 | 0 | 0 | 3761 | 1650 |
| chr11\_50308929\_50301758\_-7171-Canx | chr11 | Canx | 0.405592706 | 0 | 0 | 7172 | 721 |
| chr11\_50308929\_50304326\_-4603-Canx | chr11 | Canx | 0 | 0.911545897 | 0.180646022 | 4604 | 607 |
| chr11\_50308929\_50307470\_-1459-Canx | chr11 | Canx | 0.405592706 | 0 | 0 | 1460 | 417 |
| chr11\_50912401\_50910436\_-1965-Zfp2 | chr11 | Zfp2 | 0 | 0 | 0.541938067 | 1966 | 383 |
| chr11\_51731905\_51726485\_-5420-Sec24a | chr11 | Sec24a | 0.202796353 | 0 | 0 | 5421 | 340 |
| chr11\_51734661\_51708935\_-25726-Sec24a | chr11 | Sec24a | 0 | 0.364618359 | 0 | 25727 | 1809 |
| chr11\_51734661\_51721815\_-12846-Sec24a | chr11 | Sec24a | 0 | 0.364618359 | 0 | 12847 | 981 |
| chr11\_51734661\_51729452\_-5209-Sec24a | chr11 | Sec24a | 0 | 1.458473435 | 0.361292045 | 5210 | 639 |
| chr11\_51736521\_51700814\_-35707-Sec24a | chr11 | Sec24a | 0 | 0 | 0.180646022 | 35708 | 2492 |
| chr11\_51736521\_51707128\_-29393-Sec24a | chr11 | Sec24a | 0 | 0 | 0.180646022 | 29394 | 2212 |
| chr11\_51736521\_51712189\_-24332-Sec24a | chr11 | Sec24a | 0 | 0.182309179 | 0 | 24333 | 1869 |
| chr11\_51736521\_51726485\_-10036-Sec24a | chr11 | Sec24a | 0 | 0.546927538 | 0 | 10037 | 920 |
| chr11\_52119304\_52117987\_+1317-Ppp2ca | chr11 | Ppp2ca | 0 | 0.182309179 | 0 | 1318 | 426 |
| chr11\_52361152\_52113120\_+248032-Skp1a | chr11 | Skp1a | 0 | 0 | 0.180646022 | 248033 | 248033 |
| chr11\_52385733\_52374299\_+11434-Vdac1 | chr11 | Vdac1 | 0 | 0.182309179 | 0 | 11435 | 705 |
| chr11\_5243937\_5209939\_-33998-Kremen1 | chr11 | Kremen1 | 0.202796353 | 0 | 0 | 33999 | 534 |
| chr11\_53684301\_53668022\_-16279-Rad50 | chr11 | Rad50 | 0 | 0.182309179 | 0.180646022 | 16280 | 1596 |
| chr11\_54350701\_54335052\_+15649-Acsl6 | chr11 | Acsl6 | 0 | 0 | 0.180646022 | 15650 | 941 |
| chr11\_54504906\_54502259\_+2647-Fnip1 | chr11 | Fnip1 | 0 | 0 | 0.180646022 | 2648 | 1586 |
| chr11\_54939735\_54926704\_-13031-Tnip1 | chr11 | Tnip1 | 0 | 0 | 0.180646022 | 13032 | 839 |
| chr11\_5803179\_5802999\_-180-Pgam2 | chr11 | Pgam2 | 0.202796353 | 0 | 0 | 181 | 181 |
| chr11\_58115375\_58109556\_+5819-Cnot8 | chr11 | Cnot8 | 0 | 0.182309179 | 0 | 5820 | 823 |
| chr11\_5836374\_5831660\_-4714-Polm | chr11 | Polm | 0 | 0.182309179 | 0 | 4715 | 645 |
| chr11\_59000691\_59000537\_+154-na | chr11 | na | 0.202796353 | 0 | 0 | 155 | 155 |
| chr11\_59052711\_59049425\_-3286-Obscn | chr11 | Obscn | 0.202796353 | 0 | 0 | 3287 | 1356 |
| chr11\_59061687\_59055377\_-6310-Obscn | chr11 | Obscn | 52.22006085 | 72.74136258 | 0 | 6311 | 1056 |
| chr11\_59064450\_59015436\_-49014-Obscn | chr11 | Obscn | 0 | 0 | 0.180646022 | 49015 | 9916 |
| chr11\_59064450\_59060844\_-3606-Obscn | chr11 | Obscn | 0 | 0.182309179 | 0 | 3607 | 1539 |
| chr11\_59108017\_59106295\_-1722-Obscn | chr11 | Obscn | 91.15696059 | 0 | 0 | 1723 | 552 |
| chr11\_59122895\_59115659\_-7236-Obscn | chr11 | Obscn | 0 | 0 | 46.96796581 | 7237 | 552 |
| chr11\_59129845\_59106295\_-23550-Obscn | chr11 | Obscn | 0 | 90.06073462 | 0 | 23551 | 2208 |
| chr11\_5990422\_5972217\_-18205-Camk2b | chr11 | Camk2b | 0 | 0.182309179 | 0 | 18206 | 1858 |
| chr11\_60190622\_60185096\_+5526-Rai1 | chr11 | Rai1 | 0 | 0 | 0.180646022 | 5527 | 5527 |
| chr11\_60280283\_60258856\_-21427-Tom1l2 | chr11 | Tom1l2 | 0 | 0 | 0.361292045 | 21428 | 725 |
| chr11\_60462634\_60460787\_+1847-Drg2 | chr11 | Drg2 | 0.405592706 | 0 | 0 | 1848 | 430 |
| chr11\_60749589\_60747866\_-1723-Top3a | chr11 | Top3a | 0 | 0 | 0.361292045 | 1724 | 596 |
| chr11\_60852511\_60844165\_+8346-Dhrs7b | chr11 | Dhrs7b | 0 | 0.364618359 | 0 | 8347 | 593 |
| chr11\_6113431\_6108076\_-5355-Nudcd3 | chr11 | Nudcd3 | 0 | 0.182309179 | 0 | 5356 | 469 |
| chr11\_6125561\_6108076\_-17485-Nudcd3 | chr11 | Nudcd3 | 0 | 0 | 0.180646022 | 17486 | 613 |
| chr11\_61535383\_61532518\_-2865-Epn2 | chr11 | Epn2 | 0 | 0.182309179 | 0.180646022 | 2866 | 435 |
| chr11\_61791583\_61787429\_-4154-Ulk2 | chr11 | Ulk2 | 0.202796353 | 0 | 0 | 4155 | 359 |
| chr11\_61909946\_61886700\_-23246-Akap10 | chr11 | Akap10 | 0 | 0 | 0.180646022 | 23247 | 957 |
| chr11\_61922829\_61915024\_-7805-Akap10 | chr11 | Akap10 | 0 | 0.182309179 | 0 | 7806 | 789 |
| chr11\_62292218\_62283597\_+8621-Ttc19 | chr11 | Ttc19 | 0.811185411 | 0 | 0.361292045 | 8622 | 364 |
| chr11\_62313178\_62284131\_+29047-Ttc19 | chr11 | Ttc19 | 0 | 0 | 0.180646022 | 29048 | 719 |
| chr11\_62315944\_62283597\_+32347-Ttc19 | chr11 | Ttc19 | 0 | 0 | 0.180646022 | 32348 | 2614 |
| chr11\_62330924\_62325487\_-5437-Ncor1 | chr11 | Ncor1 | 0.405592706 | 0 | 0 | 5438 | 792 |
| chr11\_62345318\_62342997\_-2321-Ncor1 | chr11 | Ncor1 | 0 | 0 | 0.361292045 | 2322 | 696 |
| chr11\_62354688\_62351378\_-3310-Ncor1 | chr11 | Ncor1 | 0 | 0.364618359 | 0 | 3311 | 490 |
| chr11\_62398437\_62373076\_-25361-Ncor1 | chr11 | Ncor1 | 0 | 0 | 0.180646022 | 25362 | 1838 |
| chr11\_62401267\_62376635\_-24632-Ncor1 | chr11 | Ncor1 | 0 | 0.182309179 | 0 | 24633 | 1358 |
| chr11\_62433699\_62419598\_-14101-Ncor1 | chr11 | Ncor1 | 0.202796353 | 0 | 0 | 14102 | 513 |
| chr11\_6317080\_6296952\_+20128-Ogdh | chr11 | Ogdh | 0.202796353 | 0 | 0 | 20129 | 543 |
| chr11\_6334648\_6313788\_+20860-Ogdh | chr11 | Ogdh | 0 | 0.182309179 | 0 | 20861 | 456 |
| chr11\_6342623\_6334533\_+8090-Ogdh | chr11 | Ogdh | 0 | 0 | 0.180646022 | 8091 | 818 |
| chr11\_65032195\_65021941\_-10254-Arhgap44 | chr11 | Arhgap44 | 0 | 0.182309179 | 0 | 10255 | 662 |
| chr11\_65041510\_65021941\_-19569-Arhgap44 | chr11 | Arhgap44 | 0.405592706 | 0 | 0 | 19570 | 941 |
| chr11\_67191466\_67096301\_+95165-Myh2 | chr11 | Myh2 | 3.244741645 | 6.198512099 | 30.07756272 | 95166 | 95166 |
| chr11\_67204463\_67176537\_+27926-Myh2 | chr11 | Myh2 | 4.258723409 | 5.469275382 | 20.41300052 | 27927 | 27927 |
| chr11\_67211584\_67210892\_+692-Myh1 | chr11 | Myh1 | 0 | 0 | 0.361292045 | 693 | 517 |
| chr11\_67243083\_67084943\_+158140-Myh1 | chr11 | Myh1 | 0 | 0.364618359 | 0 | 158141 | 158141 |
| chr11\_67246541\_67181035\_+65506-Myh1 | chr11 | Myh1 | 99.97860194 | 18.23091794 | 45.07118257 | 65507 | 65507 |
| chr11\_67249915\_67245445\_+4470-Myh4 | chr11 | Myh4 | 0.202796353 | 0 | 0 | 4471 | 909 |
| chr11\_67257295\_67194348\_+62947-Myh1 | chr11 | Myh1 | 0 | 1.458473435 | 0 | 62948 | 62948 |
| chr11\_67258964\_67249226\_+9738-Myh4 | chr11 | Myh4 | 0 | 0.182309179 | 0 | 9739 | 3537 |
| chr11\_67297622\_67252555\_+45067-Myh8 | chr11 | Myh8 | 50.49629185 | 4.648884074 | 19.87106246 | 45068 | 45068 |
| chr11\_68721476\_68699210\_+22266-Myh10 | chr11 | Myh10 | 0 | 0 | 0.180646022 | 22267 | 533 |
| chr11\_68836323\_68833354\_-2969-Ndel1 | chr11 | Ndel1 | 0.202796353 | 0 | 0 | 2970 | 266 |
| chr11\_68845424\_68829915\_-15509-Ndel1 | chr11 | Ndel1 | 0.405592706 | 0 | 0.180646022 | 15510 | 956 |
| chr11\_68845424\_68836150\_-9274-Ndel1 | chr11 | Ndel1 | 0.202796353 | 0.182309179 | 0 | 9275 | 712 |
| chr11\_69002615\_69001733\_-882-Pfas | chr11 | Pfas | 0.202796353 | 0 | 0 | 883 | 242 |
| chr11\_69009448\_69001733\_-7715-Pfas | chr11 | Pfas | 0 | 0 | 0.180646022 | 7716 | 7716 |
| chr11\_69028064\_69027254\_+810-Ctc1 | chr11 | Ctc1 | 0 | 0 | 0.180646022 | 811 | 612 |
| chr11\_72075035\_72070303\_-4732-Pitpnm3 | chr11 | Pitpnm3 | 0.202796353 | 0 | 0 | 4733 | 811 |
| chr11\_72404004\_72399874\_-4130-Smtnl2 | chr11 | Smtnl2 | 3.853130704 | 2.91694687 | 1.264522156 | 4131 | 854 |
| chr11\_72590390\_72586486\_-3904-na | chr11 | na | 0 | 0.182309179 | 0 | 3905 | 3905 |
| chr11\_72663173\_72645537\_+17636-Ube2g1 | chr11 | Ube2g1 | 0 | 0.182309179 | 0 | 17637 | 17637 |
| chr11\_72673057\_72645537\_+27520-Ube2g1 | chr11 | Ube2g1 | 0 | 0 | 0.722584089 | 27521 | 27521 |
| chr11\_72679492\_72645537\_+33955-Ube2g1 | chr11 | Ube2g1 | 0.202796353 | 0 | 0.180646022 | 33956 | 33956 |
| chr11\_72789217\_72778283\_-10934-Cyb5d2 | chr11 | Cyb5d2 | 0 | 0.182309179 | 0 | 10935 | 998 |
| chr11\_74946219\_74928993\_+17226-Smg6 | chr11 | Smg6 | 0 | 0 | 0.903230112 | 17227 | 2570 |
| chr11\_75692732\_75692197\_+535-Crk | chr11 | Crk | 0 | 0 | 0.180646022 | 536 | 536 |
| chr11\_76117805\_76113941\_-3864-Vps53 | chr11 | Vps53 | 0 | 0 | 0.541938067 | 3865 | 429 |
| chr11\_76121596\_76117059\_-4537-Vps53 | chr11 | Vps53 | 0 | 0.182309179 | 0 | 4538 | 366 |
| chr11\_76278591\_76272376\_-6215-Nxn | chr11 | Nxn | 0 | 0.729236718 | 0 | 6216 | 460 |
| chr11\_76754800\_76748508\_-6292-Gosr1 | chr11 | Gosr1 | 0 | 0.546927538 | 0.180646022 | 6293 | 363 |
| chr11\_76813652\_76805976\_-7676-Cpd | chr11 | Cpd | 0 | 0 | 0.180646022 | 7677 | 990 |
| chr11\_77398269\_77348096\_+50173-Ssh2 | chr11 | Ssh2 | 0.202796353 | 0 | 0 | 50174 | 627 |
| chr11\_77442058\_77425301\_+16757-Ssh2 | chr11 | Ssh2 | 0 | 0 | 0.180646022 | 16758 | 618 |
| chr11\_77450222\_77425301\_+24921-Ssh2 | chr11 | Ssh2 | 0 | 0.182309179 | 0 | 24922 | 1453 |
| chr11\_77450222\_77449388\_+834-Ssh2 | chr11 | Ssh2 | 0 | 0 | 0.541938067 | 835 | 835 |
| chr11\_77553909\_77541625\_-12284-Taok1 | chr11 | Taok1 | 0.202796353 | 0 | 0 | 12285 | 1023 |
| chr11\_77605638\_77541625\_-64013-Taok1 | chr11 | Taok1 | 0 | 0 | 0.180646022 | 64014 | 2721 |
| chr11\_77812719\_77807791\_+4928-Myo18a | chr11 | Myo18a | 0 | 0.182309179 | 0 | 4929 | 921 |
| chr11\_77812719\_77809799\_+2920-Myo18a | chr11 | Myo18a | 0 | 0 | 0.180646022 | 2921 | 771 |
| chr11\_77821186\_77815856\_+5330-na | chr11 | na | 0 | 0 | 0.090323011 | 5331 | 5331 |
| chr11\_77853402\_77853217\_+185-Myo18a | chr11 | Myo18a | 0 | 0 | 0.361292045 | 186 | 186 |
| chr11\_78321766\_78319986\_+1780-Spag5 | chr11 | Spag5 | 0 | 0.182309179 | 0 | 1781 | 740 |
| chr11\_78336830\_78335427\_+1403-Pigs | chr11 | Pigs | 0.608389058 | 0 | 0 | 1404 | 351 |
| chr11\_79444209\_79408414\_+35795-Nf1 | chr11 | Nf1 | 0.202796353 | 0 | 0 | 35796 | 2300 |
| chr11\_79473475\_79418552\_+54923-Nf1 | chr11 | Nf1 | 0 | 0.364618359 | 0 | 54924 | 3470 |
| chr11\_79943230\_79942208\_-1022-na | chr11 | na | 0 | 0 | 0.180646022 | 1023 | 1023 |
| chr11\_80346886\_80319558\_+27328-Rhbdl3 | chr11 | Rhbdl3 | 0.202796353 | 0 | 0 | 27329 | 808 |
| chr11\_80346886\_80330557\_+16329-Rhbdl3 | chr11 | Rhbdl3 | 0 | 0.182309179 | 0 | 16330 | 424 |
| chr11\_80389821\_80387802\_+2019-Zfp207 | chr11 | Zfp207 | 0 | 0 | 0.180646022 | 2020 | 431 |
| chr11\_80394531\_80387802\_+6729-Zfp207 | chr11 | Zfp207 | 0 | 0 | 0.361292045 | 6730 | 999 |
| chr11\_80404766\_80395102\_+9664-na | chr11 | na | 0 | 0.09115459 | 0 | 9665 | 9665 |
| chr11\_82926187\_82919724\_+6463-Unc45b | chr11 | Unc45b | 0 | 0 | 0.361292045 | 6464 | 644 |
| chr11\_83502852\_83501115\_+1737-Taf15 | chr11 | Taf15 | 0 | 0.182309179 | 0 | 1738 | 223 |
| chr11\_83949694\_83948445\_+1249-Ddx52 | chr11 | Ddx52 | 0.202796353 | 0 | 0 | 1250 | 256 |
| chr11\_83957537\_83955289\_+2248-Ddx52 | chr11 | Ddx52 | 0 | 0 | 0.180646022 | 2249 | 299 |
| chr11\_83994462\_83986814\_+7648-Synrg | chr11 | Synrg | 0.202796353 | 0 | 0.361292045 | 7649 | 892 |
| chr11\_83994462\_83987913\_+6549-na | chr11 | na | 0 | 0.09115459 | 0 | 6550 | 6550 |
| chr11\_83994462\_83987913\_+6549-Synrg | chr11 | Synrg | 0.202796353 | 0 | 0.180646022 | 6550 | 658 |
| chr11\_84009550\_83986814\_+22736-Synrg | chr11 | Synrg | 0 | 0.364618359 | 0 | 22737 | 2001 |
| chr11\_84009550\_84008618\_+932-Synrg | chr11 | Synrg | 0 | 0 | 0.180646022 | 933 | 933 |
| chr11\_85007079\_85005808\_-1271-Usp32 | chr11 | Usp32 | 0.405592706 | 0 | 0 | 1272 | 208 |
| chr11\_8532509\_8518199\_-14310-Tns3 | chr11 | Tns3 | 0.202796353 | 0 | 0 | 14311 | 551 |
| chr11\_85509692\_85451661\_+58031-Bcas3 | chr11 | Bcas3 | 0 | 0.182309179 | 0 | 58032 | 1010 |
| chr11\_85559171\_85531793\_+27378-Bcas3 | chr11 | Bcas3 | 0 | 0 | 0.180646022 | 27379 | 588 |
| chr11\_85576882\_85554190\_+22692-Bcas3 | chr11 | Bcas3 | 0.202796353 | 0 | 0 | 22693 | 493 |
| chr11\_85583994\_85451661\_+132333-Bcas3 | chr11 | Bcas3 | 0 | 0.182309179 | 0 | 132334 | 1994 |
| chr11\_86308912\_86298280\_-10632-Med13 | chr11 | Med13 | 0 | 0.182309179 | 0 | 10633 | 1835 |
| chr11\_8642160\_8600555\_-41605-Tns3 | chr11 | Tns3 | 0.202796353 | 0 | 0 | 41606 | 41606 |
| chr11\_86535460\_86504266\_-31194-Rps6kb1 | chr11 | Rps6kb1 | 0 | 0.182309179 | 0 | 31195 | 1295 |
| chr11\_86561376\_86548783\_+12593-Tubd1 | chr11 | Tubd1 | 0.405592706 | 0 | 0 | 12594 | 1216 |
| chr11\_86665878\_86661123\_-4755-Vmp1 | chr11 | Vmp1 | 0 | 0.364618359 | 0.361292045 | 4756 | 440 |
| chr11\_86711575\_86707470\_-4105-Cltc | chr11 | Cltc | 0 | 0.182309179 | 0 | 4106 | 504 |
| chr11\_90267581\_90257520\_+10061-Mmd | chr11 | Mmd | 0.202796353 | 0 | 0 | 10062 | 490 |
| chr11\_90345978\_90340787\_-5191-Hlf | chr11 | Hlf | 0.202796353 | 0 | 0 | 5192 | 412 |
| chr11\_90548987\_90535480\_-13507-Stxbp4 | chr11 | Stxbp4 | 0 | 0.182309179 | 0 | 13508 | 478 |
| chr11\_90600280\_90571722\_-28558-Stxbp4 | chr11 | Stxbp4 | 0 | 0 | 0.180646022 | 28559 | 440 |
| chr11\_90607451\_90535480\_-71971-Stxbp4 | chr11 | Stxbp4 | 0.405592706 | 0.364618359 | 0 | 71972 | 1321 |
| chr11\_90607451\_90548811\_-58640-Stxbp4 | chr11 | Stxbp4 | 0.202796353 | 0 | 0 | 58641 | 1020 |
| chr11\_90615036\_90592332\_-22704-Stxbp4 | chr11 | Stxbp4 | 0 | 0 | 0.180646022 | 22705 | 22705 |
| chr11\_93918947\_93905159\_+13788-Mbtd1 | chr11 | Mbtd1 | 0.202796353 | 0 | 0 | 13789 | 13789 |
| chr11\_93926326\_93905159\_+21167-Mbtd1 | chr11 | Mbtd1 | 0 | 0 | 0.180646022 | 21168 | 1285 |
| chr11\_94102158\_94097218\_+4940-Spag9 | chr11 | Spag9 | 0 | 0.182309179 | 0 | 4941 | 690 |
| chr11\_94339733\_94333901\_+5832-Ankrd40 | chr11 | Ankrd40 | 0.608389058 | 0 | 0 | 5833 | 992 |
| chr11\_94942114\_94941102\_+1012-Col1a1 | chr11 | Col1a1 | 0 | 0 | 0.180646022 | 1013 | 351 |
| chr11\_95754055\_95749000\_+5055-Zfp652 | chr11 | Zfp652 | 0.608389058 | 0 | 0 | 5056 | 5056 |
| chr11\_96323445\_96322111\_+1334-na | chr11 | na | 0 | 0 | 0.541938067 | 1335 | 1335 |
| chr11\_97329521\_97328115\_+1406-na | chr11 | na | 0.405592706 | 0 | 0 | 1407 | 1407 |
| chr11\_97378711\_97373066\_+5645-Socs7 | chr11 | Socs7 | 0 | 0 | 0.180646022 | 5646 | 1160 |
| chr11\_97378711\_97377936\_+775-Socs7 | chr11 | Socs7 | 0.405592706 | 0.546927538 | 0 | 776 | 300 |
| chr11\_98011497\_98009663\_-1834-na | chr11 | na | 0.101398176 | 0 | 0 | 1835 | 1835 |
| chr12\_100382178\_100340497\_-41681-Ttc7b | chr12 | Ttc7b | 0 | 0.182309179 | 0 | 41682 | 720 |
| chr12\_100385960\_100340497\_-45463-Ttc7b | chr12 | Ttc7b | 0.202796353 | 0 | 0 | 45464 | 943 |
| chr12\_100495440\_100446860\_-48580-Ttc7b | chr12 | Ttc7b | 0 | 0 | 0.180646022 | 48581 | 422 |
| chr12\_100500230\_100495272\_-4958-Ttc7b | chr12 | Ttc7b | 0 | 0.182309179 | 0 | 4959 | 324 |
| chr12\_100616104\_100595815\_-20289-Rps6ka5 | chr12 | Rps6ka5 | 0 | 0.182309179 | 0 | 20290 | 296 |
| chr12\_100619641\_100595815\_-23826-Rps6ka5 | chr12 | Rps6ka5 | 0.202796353 | 0.546927538 | 0.903230112 | 23827 | 412 |
| chr12\_100654489\_100615997\_-38492-Rps6ka5 | chr12 | Rps6ka5 | 0 | 0.182309179 | 0 | 38493 | 443 |
| chr12\_100859652\_100838500\_+21152-9030617O03Rik | chr12 | 9030617O03Rik | 0 | 0 | 0.180646022 | 21153 | 1304 |
| chr12\_100871506\_100867104\_+4402-9030617O03Rik | chr12 | 9030617O03Rik | 0 | 0.364618359 | 0 | 4403 | 355 |
| chr12\_100966461\_100940085\_-26376-Ccdc88c | chr12 | Ccdc88c | 0.202796353 | 0 | 0 | 26377 | 2359 |
| chr12\_100971279\_100967808\_-3471-Ccdc88c | chr12 | Ccdc88c | 0 | 0 | 0.361292045 | 3472 | 469 |
| chr12\_101051662\_101044490\_-7172-Smek1 | chr12 | Smek1 | 0.202796353 | 0 | 0 | 7173 | 720 |
| chr12\_101890618\_101871824\_-18794-Trip11 | chr12 | Trip11 | 0.202796353 | 0 | 0 | 18795 | 3965 |
| chr12\_102484574\_102471998\_+12576-Golga5 | chr12 | Golga5 | 0 | 0.182309179 | 0 | 12577 | 1515 |
| chr12\_102812843\_102807900\_-4943-Btbd7 | chr12 | Btbd7 | 0.202796353 | 0 | 0 | 4944 | 446 |
| chr12\_103338614\_103333292\_-5322-Asb2 | chr12 | Asb2 | 0 | 0 | 0.180646022 | 5323 | 5323 |
| chr12\_103345932\_101022294\_-2323638-Trip11 | chr12 | Trip11 | 0 | 0 | 0.180646022 | 2323639 | 0 |
| chr12\_105641293\_105639202\_-2091-Atg2b | chr12 | Atg2b | 0 | 0 | 0.361292045 | 2092 | 345 |
| chr12\_105651523\_105648313\_-3210-Atg2b | chr12 | Atg2b | 0 | 0 | 0.180646022 | 3211 | 625 |
| chr12\_105662961\_105651381\_-11580-Atg2b | chr12 | Atg2b | 0.405592706 | 0.182309179 | 0.361292045 | 11581 | 1669 |
| chr12\_105716079\_105710145\_+5934-Ak7 | chr12 | Ak7 | 0 | 0 | 0.180646022 | 5935 | 396 |
| chr12\_108167395\_108157754\_-9641-Setd3 | chr12 | Setd3 | 0 | 0.182309179 | 0 | 9642 | 805 |
| chr12\_108515215\_108510177\_+5038-Eml1 | chr12 | Eml1 | 0.202796353 | 0 | 0 | 5039 | 512 |
| chr12\_110554896\_110545595\_+9301-Ppp2r5c | chr12 | Ppp2r5c | 0 | 0 | 0.180646022 | 9302 | 447 |
| chr12\_110561468\_110545595\_+15873-Ppp2r5c | chr12 | Ppp2r5c | 0.405592706 | 0 | 0 | 15874 | 618 |
| chr12\_110779890\_110779296\_+594-Wdr20 | chr12 | Wdr20 | 0 | 0 | 0.180646022 | 595 | 595 |
| chr12\_111255363\_111237562\_+17801-Traf3 | chr12 | Traf3 | 0 | 0.182309179 | 0 | 17802 | 974 |
| chr12\_111647728\_111592577\_+55151-Mark3 | chr12 | Mark3 | 0.202796353 | 0 | 0 | 55152 | 1952 |
| chr12\_111713418\_111592577\_+120841-Mark3 | chr12 | Mark3 | 0.202796353 | 0 | 0 | 120842 | 120842 |
| chr12\_111789459\_111778020\_+11439-Klc1 | chr12 | Klc1 | 0.405592706 | 0 | 0 | 11440 | 826 |
| chr12\_111795678\_111793649\_+2029-Klc1 | chr12 | Klc1 | 0.202796353 | 0.182309179 | 0.541938067 | 2030 | 182 |
| chr12\_111806074\_111778020\_+28054-Klc1 | chr12 | Klc1 | 0 | 0.182309179 | 0 | 28055 | 5931 |
| chr12\_112922057\_112920072\_-1985-Jag2 | chr12 | Jag2 | 0.608389058 | 0 | 0 | 1986 | 392 |
| chr12\_112983849\_112969265\_-14584-Brf1 | chr12 | Brf1 | 0.202796353 | 0 | 0 | 14585 | 726 |
| chr12\_116334256\_116317830\_+16426-Esyt2 | chr12 | Esyt2 | 0.405592706 | 0 | 0 | 16427 | 896 |
| chr12\_13289980\_13279388\_+10592-Nbas | chr12 | Nbas | 0.202796353 | 0 | 0 | 10593 | 411 |
| chr12\_13336410\_13306904\_+29506-Nbas | chr12 | Nbas | 0 | 0 | 0.180646022 | 29507 | 1454 |
| chr12\_13453622\_13322856\_+130766-Nbas | chr12 | Nbas | 0 | 0 | 0.180646022 | 130767 | 3417 |
| chr12\_13484044\_13469841\_+14203-Nbas | chr12 | Nbas | 0.405592706 | 0 | 0 | 14204 | 927 |
| chr12\_13484044\_13482386\_+1658-Nbas | chr12 | Nbas | 1.41957447 | 0.546927538 | 1.625814201 | 1659 | 586 |
| chr12\_16568519\_16546721\_-21798-Lpin1 | chr12 | Lpin1 | 0.202796353 | 0 | 0 | 21799 | 1500 |
| chr12\_16568519\_16558409\_-10110-Lpin1 | chr12 | Lpin1 | 0 | 0.182309179 | 0 | 10111 | 1057 |
| chr12\_16568519\_16560982\_-7537-Lpin1 | chr12 | Lpin1 | 0.608389058 | 2.370019332 | 1.264522156 | 7538 | 886 |
| chr12\_16975558\_16957226\_+18332-Rock2 | chr12 | Rock2 | 0 | 0.182309179 | 0 | 18333 | 2276 |
| chr12\_16978102\_16957226\_+20876-Rock2 | chr12 | Rock2 | 0 | 0.364618359 | 0 | 20877 | 2831 |
| chr12\_16982747\_16974842\_+7905-Rock2 | chr12 | Rock2 | 0 | 0 | 0.180646022 | 7906 | 7906 |
| chr12\_16984859\_16957226\_+27633-Rock2 | chr12 | Rock2 | 0 | 0.182309179 | 0 | 27634 | 3053 |
| chr12\_17416961\_17369466\_+47495-Nol10 | chr12 | Nol10 | 0 | 0.182309179 | 0 | 47496 | 1085 |
| chr12\_17424752\_17373562\_+51190-Nol10 | chr12 | Nol10 | 0 | 0.182309179 | 0 | 51191 | 1038 |
| chr12\_25061278\_25052797\_+8481-na | chr12 | na | 0 | 0.09115459 | 0 | 8482 | 8482 |
| chr12\_28867153\_28859252\_+7901-Tssc1 | chr12 | Tssc1 | 0.405592706 | 0 | 0 | 7902 | 703 |
| chr12\_28867153\_28862955\_+4198-Tssc1 | chr12 | Tssc1 | 0 | 0.182309179 | 0 | 4199 | 566 |
| chr12\_31802483\_31790847\_+11636-Cog5 | chr12 | Cog5 | 0.202796353 | 0 | 0 | 11637 | 357 |
| chr12\_3496936\_3496225\_+711-Asxl2 | chr12 | Asxl2 | 0 | 0.182309179 | 0 | 712 | 712 |
| chr12\_35092913\_35078900\_+14013-Snx13 | chr12 | Snx13 | 0 | 0 | 0.722584089 | 14014 | 751 |
| chr12\_35107556\_35085939\_+21617-Snx13 | chr12 | Snx13 | 0 | 0.911545897 | 0.541938067 | 21618 | 1379 |
| chr12\_38127383\_38100364\_+27019-Dgkb | chr12 | Dgkb | 0 | 0 | 0.180646022 | 27020 | 540 |
| chr12\_3849739\_3835027\_+14712-Dnmt3a | chr12 | Dnmt3a | 0.202796353 | 0 | 0 | 14713 | 339 |
| chr12\_3873428\_3835027\_+38401-Dnmt3a | chr12 | Dnmt3a | 0.202796353 | 0.546927538 | 0 | 38402 | 798 |
| chr12\_3902814\_3899193\_+3621-Dnmt3a | chr12 | Dnmt3a | 0.405592706 | 0 | 0.180646022 | 3622 | 848 |
| chr12\_40212418\_40203919\_-8499-Ifrd1 | chr12 | Ifrd1 | 0 | 0.182309179 | 0 | 8500 | 469 |
| chr12\_40530260\_40525829\_+4431-na | chr12 | na | 0 | 0.182309179 | 0 | 4432 | 4432 |
| chr12\_40640445\_40621221\_+19224-Dock4 | chr12 | Dock4 | 0.608389058 | 0 | 0 | 19225 | 512 |
| chr12\_40649489\_40621221\_+28268-Dock4 | chr12 | Dock4 | 0.405592706 | 0 | 0 | 28269 | 664 |
| chr12\_40649489\_40626337\_+23152-Dock4 | chr12 | Dock4 | 0 | 0 | 0.361292045 | 23153 | 539 |
| chr12\_40649489\_40631522\_+17967-Dock4 | chr12 | Dock4 | 0 | 0.182309179 | 0 | 17968 | 483 |
| chr12\_40676790\_40621221\_+55569-Dock4 | chr12 | Dock4 | 0 | 0 | 0.180646022 | 55570 | 1029 |
| chr12\_4344502\_4322868\_-21634-Ncoa1 | chr12 | Ncoa1 | 0.202796353 | 0 | 0 | 21635 | 549 |
| chr12\_44007841\_43998336\_-9505-na | chr12 | na | 0 | 0.182309179 | 0 | 9506 | 9506 |
| chr12\_44299291\_44283538\_+15753-Pnpla8 | chr12 | Pnpla8 | 0 | 0.182309179 | 0 | 15754 | 794 |
| chr12\_44299291\_44288171\_+11120-Pnpla8 | chr12 | Pnpla8 | 0 | 0.182309179 | 0 | 11121 | 477 |
| chr12\_44305105\_44288171\_+16934-Pnpla8 | chr12 | Pnpla8 | 0 | 0.182309179 | 0 | 16935 | 672 |
| chr12\_4673607\_4613243\_+60364-Itsn2 | chr12 | Itsn2 | 0 | 0.182309179 | 0 | 60365 | 3573 |
| chr12\_4673607\_4649983\_+23624-Itsn2 | chr12 | Itsn2 | 0 | 0.182309179 | 0 | 23625 | 1594 |
| chr12\_4735036\_4715571\_-19465-na | chr12 | na | 0 | 0 | 0.090323011 | 19466 | 19466 |
| chr12\_4974279\_4973968\_+311-Atad2b | chr12 | Atad2b | 0.202796353 | 0 | 0 | 312 | 312 |
| chr12\_4991058\_4937390\_+53668-Atad2b | chr12 | Atad2b | 0 | 0 | 0.180646022 | 53669 | 2244 |
| chr12\_51357192\_51351405\_+5787-G2e3 | chr12 | G2e3 | 0.202796353 | 0 | 0 | 5788 | 532 |
| chr12\_5137935\_5137423\_-512-Klhl29 | chr12 | Klhl29 | 0.811185411 | 0 | 0 | 513 | 513 |
| chr12\_51400098\_51384105\_+15993-Scfd1 | chr12 | Scfd1 | 0 | 0 | 0.180646022 | 15994 | 794 |
| chr12\_51629507\_51619814\_-9693-Strn3 | chr12 | Strn3 | 0 | 0.182309179 | 0 | 9694 | 897 |
| chr12\_51661713\_51627110\_-34603-Strn3 | chr12 | Strn3 | 0 | 0 | 0.361292045 | 34604 | 1435 |
| chr12\_51800972\_51776496\_-24476-Hectd1 | chr12 | Hectd1 | 0 | 0 | 0.361292045 | 24477 | 1958 |
| chr12\_51948005\_51905321\_-42684-Heatr5a | chr12 | Heatr5a | 0.202796353 | 0 | 0 | 42685 | 2220 |
| chr12\_51956270\_51950929\_-5341-Heatr5a | chr12 | Heatr5a | 0 | 0.182309179 | 0 | 5342 | 742 |
| chr12\_52542636\_52516079\_+26557-Arhgap5 | chr12 | Arhgap5 | 0.202796353 | 0 | 0 | 26558 | 4037 |
| chr12\_54765679\_54751782\_-13897-Snx6 | chr12 | Snx6 | 0 | 0.182309179 | 0 | 13898 | 651 |
| chr12\_55414498\_55407469\_+7029-Psma6 | chr12 | Psma6 | 0 | 0 | 0.180646022 | 7030 | 607 |
| chr12\_55709707\_55683907\_-25800-Ralgapa1 | chr12 | Ralgapa1 | 0 | 0.182309179 | 0 | 25801 | 1371 |
| chr12\_55709707\_55708994\_-713-Ralgapa1 | chr12 | Ralgapa1 | 0 | 0 | 0.180646022 | 714 | 293 |
| chr12\_59005316\_58997136\_-8180-Sec23a | chr12 | Sec23a | 0 | 0.182309179 | 0 | 8181 | 607 |
| chr12\_59172592\_59136064\_+36528-Ctage5 | chr12 | Ctage5 | 0 | 0.364618359 | 0 | 36529 | 1412 |
| chr12\_59188545\_59136064\_+52481-Ctage5 | chr12 | Ctage5 | 0.405592706 | 0 | 0 | 52482 | 2194 |
| chr12\_65020400\_65006875\_+13525-Fam179b | chr12 | Fam179b | 0 | 0.182309179 | 0 | 13526 | 1138 |
| chr12\_65122090\_65102562\_+19528-Fancm | chr12 | Fancm | 0 | 0 | 0.361292045 | 19529 | 3126 |
| chr12\_69610826\_69603476\_-7350-Sos2 | chr12 | Sos2 | 0 | 0.546927538 | 0 | 7351 | 610 |
| chr12\_70051250\_70038539\_-12711-Nin | chr12 | Nin | 0 | 0 | 0.180646022 | 12712 | 3483 |
| chr12\_71194466\_71184423\_+10043-2700049A03Rik | chr12 | 2700049A03Rik | 0 | 0 | 0.180646022 | 10044 | 1194 |
| chr12\_73181924\_73168000\_+13924-Mnat1 | chr12 | Mnat1 | 0 | 0 | 0.541938067 | 13925 | 472 |
| chr12\_73188265\_73168000\_+20265-Mnat1 | chr12 | Mnat1 | 0.405592706 | 0 | 0 | 20266 | 598 |
| chr12\_73219142\_73168000\_+51142-Mnat1 | chr12 | Mnat1 | 0 | 0 | 0.541938067 | 51143 | 720 |
| chr12\_73928298\_73926557\_+1741-Hif1a | chr12 | Hif1a | 0 | 0.364618359 | 0 | 1742 | 422 |
| chr12\_75343537\_75338163\_-5374-na | chr12 | na | 0 | 0.182309179 | 0 | 5375 | 5375 |
| chr12\_75343537\_75338169\_-5368-na | chr12 | na | 0 | 0.182309179 | 0 | 5369 | 5369 |
| chr12\_77365359\_77323845\_+41514-Fut8 | chr12 | Fut8 | 0.608389058 | 0 | 0 | 41515 | 806 |
| chr12\_78494057\_78492038\_+2019-Gphn | chr12 | Gphn | 0 | 0.182309179 | 0 | 2020 | 381 |
| chr12\_78590671\_78504617\_+86054-Gphn | chr12 | Gphn | 0.202796353 | 0 | 0.361292045 | 86055 | 478 |
| chr12\_78824872\_78819204\_+5668-Mpp5 | chr12 | Mpp5 | 0.608389058 | 0 | 0 | 5669 | 424 |
| chr12\_79507838\_79482529\_+25309-na | chr12 | na | 0 | 0.09115459 | 0 | 25310 | 25310 |
| chr12\_80376731\_80348320\_-28411-Dcaf5 | chr12 | Dcaf5 | 0.405592706 | 0.182309179 | 0.361292045 | 28412 | 409 |
| chr12\_80404698\_80348320\_-56378-Dcaf5 | chr12 | Dcaf5 | 0.608389058 | 0.182309179 | 0 | 56379 | 860 |
| chr12\_80404698\_80364004\_-40694-Dcaf5 | chr12 | Dcaf5 | 0 | 0.182309179 | 0.361292045 | 40695 | 732 |
| chr12\_80404698\_80397653\_-7045-Dcaf5 | chr12 | Dcaf5 | 0.202796353 | 0 | 0 | 7046 | 451 |
| chr12\_80497013\_80484246\_+12767-Exd2 | chr12 | Exd2 | 0 | 0.182309179 | 0 | 12768 | 1292 |
| chr12\_81316660\_81314260\_-2400-Slc8a3 | chr12 | Slc8a3 | 0 | 0.182309179 | 0.180646022 | 2401 | 2401 |
| chr12\_81359344\_81314260\_-45084-Slc8a3 | chr12 | Slc8a3 | 0.202796353 | 0 | 0 | 45085 | 45085 |
| chr12\_81948415\_81928242\_+20173-Pcnx | chr12 | Pcnx | 0 | 0.364618359 | 0 | 20174 | 467 |
| chr12\_81956263\_81928242\_+28021-Pcnx | chr12 | Pcnx | 0.202796353 | 0 | 0 | 28022 | 872 |
| chr12\_81956263\_81946931\_+9332-Pcnx | chr12 | Pcnx | 0.202796353 | 0 | 0 | 9333 | 554 |
| chr12\_82372542\_82357233\_+15309-Sipa1l1 | chr12 | Sipa1l1 | 0.202796353 | 0 | 0 | 15310 | 495 |
| chr12\_8238615\_8227220\_+11395-Ldah | chr12 | Ldah | 0.202796353 | 0 | 0.180646022 | 11396 | 317 |
| chr12\_8268598\_8238443\_+30155-Ldah | chr12 | Ldah | 0 | 0.182309179 | 0 | 30156 | 408 |
| chr12\_8275890\_8232666\_+43224-Ldah | chr12 | Ldah | 0 | 0.364618359 | 0 | 43225 | 43225 |
| chr12\_83575136\_83574632\_-504-Zfyve1 | chr12 | Zfyve1 | 0.405592706 | 0 | 0 | 505 | 505 |
| chr12\_83777495\_83776354\_+1141-Papln | chr12 | Papln | 0.405592706 | 0 | 0 | 1142 | 533 |
| chr12\_84127017\_84121155\_+5862-Dnal1 | chr12 | Dnal1 | 0.202796353 | 0 | 0 | 5863 | 333 |
| chr12\_84436918\_84432227\_-4691-Aldh6a1 | chr12 | Aldh6a1 | 0 | 0 | 0.180646022 | 4692 | 973 |
| chr12\_84927410\_84920069\_-7341-Arel1 | chr12 | Arel1 | 0 | 0 | 0.361292045 | 7342 | 1391 |
| chr12\_85030887\_85028770\_+2117-Ylpm1 | chr12 | Ylpm1 | 0 | 0 | 0.180646022 | 2118 | 2118 |
| chr12\_85269474\_85266152\_-3322-Mlh3 | chr12 | Mlh3 | 0 | 0.182309179 | 0 | 3323 | 3323 |
| chr12\_85311446\_85307930\_-3516-Nek9 | chr12 | Nek9 | 0 | 0.182309179 | 0 | 3517 | 502 |
| chr12\_85327499\_85320714\_-6785-Nek9 | chr12 | Nek9 | 0 | 0.364618359 | 0 | 6786 | 420 |
| chr12\_85879475\_85863564\_+15911-Ttll5 | chr12 | Ttll5 | 0.202796353 | 0.182309179 | 0 | 15912 | 457 |
| chr12\_85892210\_85863564\_+28646-Ttll5 | chr12 | Ttll5 | 0 | 0.182309179 | 0 | 28647 | 696 |
| chr12\_85939510\_85925640\_+13870-Ttll5 | chr12 | Ttll5 | 0 | 0 | 0.180646022 | 13871 | 1041 |
| chr12\_85956720\_85889159\_+67561-Ttll5 | chr12 | Ttll5 | 0 | 0.364618359 | 0 | 67562 | 2329 |
| chr12\_86267183\_86256868\_+10315-Gpatch2l | chr12 | Gpatch2l | 0 | 0.364618359 | 0 | 10316 | 430 |
| chr12\_86269061\_86256481\_+12580-Gpatch2l | chr12 | Gpatch2l | 0 | 0.273463769 | 0.361292045 | 12581 | 12581 |
| chr12\_86269061\_86256868\_+12193-Gpatch2l | chr12 | Gpatch2l | 2.636352587 | 0.729236718 | 0.903230112 | 12194 | 531 |
| chr12\_86269061\_86260577\_+8484-Gpatch2l | chr12 | Gpatch2l | 0.709787235 | 1.276164256 | 1.354845167 | 8485 | 466 |
| chr12\_86281543\_86256868\_+24675-Gpatch2l | chr12 | Gpatch2l | 0.202796353 | 0 | 0 | 24676 | 626 |
| chr12\_86721380\_86720230\_-1150-Angel1 | chr12 | Angel1 | 0.608389058 | 0.182309179 | 0 | 1151 | 504 |
| chr12\_87251752\_87244455\_-7297-na | chr12 | na | 0 | 0 | 0.180646022 | 7298 | 7298 |
| chr12\_87253258\_87252635\_-623-Vipas39 | chr12 | Vipas39 | 0 | 0 | 0.090323011 | 624 | 127 |
| chr12\_91370196\_91364360\_-5836-Cep128 | chr12 | Cep128 | 0.405592706 | 0 | 0 | 5837 | 384 |
| chr12\_91743878\_91740471\_-3407-Ston2 | chr12 | Ston2 | 0 | 0.364618359 | 0 | 3408 | 549 |
| chr12\_98705180\_98698831\_-6349-Ptpn21 | chr12 | Ptpn21 | 0.405592706 | 0 | 0 | 6350 | 345 |
| chr12\_98785741\_98783582\_+2159-Zc3h14 | chr12 | Zc3h14 | 0.405592706 | 0 | 0 | 2160 | 454 |
| chr12\_98946613\_98942218\_+4395-Ttc8 | chr12 | Ttc8 | 0 | 0 | 0.180646022 | 4396 | 480 |
| chr12\_98964607\_98906328\_+58279-Ttc8 | chr12 | Ttc8 | 0 | 0.182309179 | 0 | 58280 | 58280 |
| chr12\_99291301\_99209461\_-81840-Foxn3 | chr12 | Foxn3 | 0 | 0 | 0.180646022 | 81841 | 237 |
| chr12\_99388917\_99209461\_-179456-Foxn3 | chr12 | Foxn3 | 0 | 0 | 0.541938067 | 179457 | 907 |
| chr12\_99388917\_99289870\_-99047-Foxn3 | chr12 | Foxn3 | 0.405592706 | 0 | 0 | 99048 | 99048 |
| chr12\_99388917\_99291237\_-97680-Foxn3 | chr12 | Foxn3 | 0.608389058 | 0.546927538 | 0 | 97681 | 735 |
| chr13\_100042285\_100023600\_-18685-Bdp1 | chr13 | Bdp1 | 0 | 0 | 0.361292045 | 18686 | 1721 |
| chr13\_101709742\_101701447\_-8295-Pik3r1 | chr13 | Pik3r1 | 0.202796353 | 0.546927538 | 0.180646022 | 8296 | 582 |
| chr13\_101758039\_101757326\_-713-Pik3r1 | chr13 | Pik3r1 | 0.608389058 | 0.182309179 | 0 | 714 | 714 |
| chr13\_101762530\_101757326\_-5204-Pik3r1 | chr13 | Pik3r1 | 0 | 0.182309179 | 0 | 5205 | 5205 |
| chr13\_102853919\_101757326\_-1096593-Mast4 | chr13 | Mast4 | 0.405592706 | 0 | 0 | 1096594 | 1096594 |
| chr13\_103884260\_103824720\_-59540-Erbb2ip | chr13 | Erbb2ip | 0.202796353 | 0 | 0 | 59541 | 3888 |
| chr13\_104400006\_104375642\_+24364-Adamts6 | chr13 | Adamts6 | 0.202796353 | 0 | 0 | 24365 | 460 |
| chr13\_104479675\_104444053\_+35622-Adamts6 | chr13 | Adamts6 | 0 | 0.182309179 | 0 | 35623 | 1129 |
| chr13\_106993942\_106990038\_-3904-Kif2a | chr13 | Kif2a | 0 | 0 | 0.541938067 | 3905 | 267 |
| chr13\_109614457\_109550009\_+64448-na | chr13 | na | 0 | 0.182309179 | 0 | 64449 | 64449 |
| chr13\_109772680\_109614419\_+158261-na | chr13 | na | 0 | 0.09115459 | 0 | 158262 | 158262 |
| chr13\_109772680\_109740387\_+32293-Pde4d | chr13 | Pde4d | 0 | 0.729236718 | 0 | 32294 | 353 |
| chr13\_109772680\_109769534\_+3146-Pde4d | chr13 | Pde4d | 0 | 0.182309179 | 0 | 3147 | 124 |
| chr13\_109903689\_109769534\_+134155-Pde4d | chr13 | Pde4d | 0 | 0 | 0.180646022 | 134156 | 237 |
| chr13\_109939361\_109933868\_+5493-Pde4d | chr13 | Pde4d | 0.202796353 | 0 | 0 | 5494 | 631 |
| chr13\_111768593\_111750443\_-18150-Map3k1 | chr13 | Map3k1 | 0 | 0 | 0.541938067 | 18151 | 3312 |
| chr13\_112498889\_112493589\_+5300-Il6st | chr13 | Il6st | 0.405592706 | 0 | 0 | 5301 | 867 |
| chr13\_112963356\_112960323\_+3033-Dhx29 | chr13 | Dhx29 | 0 | 0 | 0.180646022 | 3034 | 532 |
| chr13\_114216049\_114204072\_+11977-Gm41072 | chr13 | Gm41072 | 0.405592706 | 0 | 0 | 11978 | 11978 |
| chr13\_116895781\_116876531\_-19250-Parp8 | chr13 | Parp8 | 0.202796353 | 0 | 0 | 19251 | 1117 |
| chr13\_116895781\_116893000\_-2781-Parp8 | chr13 | Parp8 | 0 | 0 | 0.541938067 | 2782 | 832 |
| chr13\_116902833\_116893000\_-9833-na | chr13 | na | 0 | 0.09115459 | 0 | 9834 | 9834 |
| chr13\_116902856\_116876531\_-26325-Parp8 | chr13 | Parp8 | 0.202796353 | 0 | 0 | 26326 | 1184 |
| chr13\_116902856\_116893000\_-9856-Parp8 | chr13 | Parp8 | 0.202796353 | 0.182309179 | 0.361292045 | 9857 | 899 |
| chr13\_118388780\_118386652\_-2128-Mrps30 | chr13 | Mrps30 | 0 | 0.546927538 | 0 | 2129 | 2129 |
| chr13\_119404754\_119381676\_-23078-Nnt | chr13 | Nnt | 0.202796353 | 0 | 0 | 23079 | 1016 |
| chr13\_119790287\_119775767\_-14520-Zfp131 | chr13 | Zfp131 | 0 | 0.182309179 | 0 | 14521 | 1157 |
| chr13\_12205357\_12188041\_-17316-Mtr | chr13 | Mtr | 0 | 0 | 0.180646022 | 17317 | 1306 |
| chr13\_12250691\_12204743\_-45948-Mtr | chr13 | Mtr | 0.405592706 | 0.911545897 | 0 | 45949 | 2348 |
| chr13\_12250691\_12225462\_-25229-Mtr | chr13 | Mtr | 0 | 0.182309179 | 0 | 25230 | 1449 |
| chr13\_12250691\_12239649\_-11042-Mtr | chr13 | Mtr | 0.405592706 | 0 | 0.180646022 | 11043 | 681 |
| chr13\_12310961\_12288507\_-22454-Actn2 | chr13 | Actn2 | 0 | 0 | 0.180646022 | 22455 | 1280 |
| chr13\_12459316\_12454735\_-4581-Lgals8 | chr13 | Lgals8 | 0 | 0.364618359 | 0.541938067 | 4582 | 443 |
| chr13\_13991552\_13987353\_+4199-B3galnt2 | chr13 | B3galnt2 | 0 | 0.546927538 | 0 | 4200 | 374 |
| chr13\_14615743\_14615396\_-347-na | chr13 | na | 0 | 0 | 0.361292045 | 348 | 348 |
| chr13\_17801457\_17750257\_-51200-Cdk13 | chr13 | Cdk13 | 0 | 0.182309179 | 0 | 51201 | 51201 |
| chr13\_17897102\_17893122\_-3980-Rala | chr13 | Rala | 0 | 0.182309179 | 0 | 3981 | 359 |
| chr13\_20589726\_20449470\_+140256-Elmo1 | chr13 | Elmo1 | 0 | 0.364618359 | 0 | 140257 | 605 |
| chr13\_24689509\_24665409\_+24100-Fam65b | chr13 | Fam65b | 0.202796353 | 0 | 0 | 24101 | 938 |
| chr13\_29357464\_29354641\_-2823-na | chr13 | na | 0 | 0 | 0.361292045 | 2824 | 2824 |
| chr13\_29552395\_29354630\_-197765-Cdkal1 | chr13 | Cdkal1 | 0 | 0.182309179 | 0.361292045 | 197766 | 806 |
| chr13\_29552395\_29517413\_-34982-Cdkal1 | chr13 | Cdkal1 | 0 | 0.182309179 | 0.361292045 | 34983 | 313 |
| chr13\_29575775\_29474529\_-101246-Cdkal1 | chr13 | Cdkal1 | 0.202796353 | 0 | 0 | 101247 | 101247 |
| chr13\_29579314\_29517413\_-61901-Cdkal1 | chr13 | Cdkal1 | 0.608389058 | 0 | 0 | 61902 | 61902 |
| chr13\_29596988\_29517413\_-79575-Cdkal1 | chr13 | Cdkal1 | 0 | 0 | 0.451615056 | 79576 | 79576 |
| chr13\_29625724\_29625621\_-103-Cdkal1 | chr13 | Cdkal1 | 0 | 0 | 0.180646022 | 104 | 104 |
| chr13\_29854941\_29517413\_-337528-Cdkal1 | chr13 | Cdkal1 | 0.405592706 | 0 | 0 | 337529 | 1284 |
| chr13\_29854941\_29846228\_-8713-Cdkal1 | chr13 | Cdkal1 | 0 | 0.729236718 | 0 | 8714 | 327 |
| chr13\_30900903\_30864831\_-36072-Exoc2 | chr13 | Exoc2 | 0.202796353 | 0 | 0 | 36073 | 1165 |
| chr13\_30940770\_30925723\_-15047-Exoc2 | chr13 | Exoc2 | 0.202796353 | 0 | 0.180646022 | 15048 | 704 |
| chr13\_32717620\_32708880\_-8740-Mylk4 | chr13 | Mylk4 | 0 | 0.182309179 | 0 | 8741 | 499 |
| chr13\_32717620\_32712758\_-4862-Mylk4 | chr13 | Mylk4 | 0.405592706 | 0 | 0 | 4863 | 432 |
| chr13\_32720601\_32708880\_-11721-Mylk4 | chr13 | Mylk4 | 0.202796353 | 0.364618359 | 0.361292045 | 11722 | 641 |
| chr13\_32724884\_32708880\_-16004-Mylk4 | chr13 | Mylk4 | 0.608389058 | 0 | 0 | 16005 | 951 |
| chr13\_32724884\_32712758\_-12126-Mylk4 | chr13 | Mylk4 | 0 | 0 | 0.361292045 | 12127 | 884 |
| chr13\_32724884\_32715859\_-9025-Mylk4 | chr13 | Mylk4 | 0 | 0.182309179 | 0.180646022 | 9026 | 805 |
| chr13\_32727132\_32708880\_-18252-Mylk4 | chr13 | Mylk4 | 0.202796353 | 0.182309179 | 0 | 18253 | 1241 |
| chr13\_32727132\_32712758\_-14374-Mylk4 | chr13 | Mylk4 | 0 | 0.182309179 | 0 | 14375 | 1174 |
| chr13\_32727132\_32715859\_-11273-Mylk4 | chr13 | Mylk4 | 0.202796353 | 0.182309179 | 0 | 11274 | 1095 |
| chr13\_32729154\_32708880\_-20274-Mylk4 | chr13 | Mylk4 | 0 | 0 | 0.180646022 | 20275 | 1741 |
| chr13\_32729154\_32712758\_-16396-Mylk4 | chr13 | Mylk4 | 0 | 0.364618359 | 0 | 16397 | 1674 |
| chr13\_34319104\_34298997\_-20107-Slc22a23 | chr13 | Slc22a23 | 0 | 0.364618359 | 0 | 20108 | 20108 |
| chr13\_35816575\_35790101\_+26474-Cdyl | chr13 | Cdyl | 0 | 0.364618359 | 0.180646022 | 26475 | 742 |
| chr13\_35858248\_35815909\_+42339-Cdyl | chr13 | Cdyl | 0.405592706 | 0 | 0 | 42340 | 1097 |
| chr13\_3600334\_3595497\_-4837-Fam208b | chr13 | Fam208b | 0 | 0.182309179 | 0 | 4838 | 592 |
| chr13\_36246494\_36204509\_+41985-Fars2 | chr13 | Fars2 | 0 | 0 | 0.180646022 | 41986 | 925 |
| chr13\_36342097\_36336857\_+5240-na | chr13 | na | 0 | 0.09115459 | 0 | 5241 | 5241 |
| chr13\_36918635\_36892806\_-25829-F13a1 | chr13 | F13a1 | 0 | 0 | 0.180646022 | 25830 | 796 |
| chr13\_37899787\_37858985\_+40802-Rreb1 | chr13 | Rreb1 | 0.202796353 | 0 | 0 | 40803 | 772 |
| chr13\_37916595\_37916022\_+573-Rreb1 | chr13 | Rreb1 | 0 | 0 | 0.361292045 | 574 | 276 |
| chr13\_38485936\_38469614\_+16322-Bmp6 | chr13 | Bmp6 | 0 | 0.182309179 | 0 | 16323 | 540 |
| chr13\_38943166\_38934738\_-8428-Slc35b3 | chr13 | Slc35b3 | 0 | 0 | 0.180646022 | 8429 | 509 |
| chr13\_38955936\_38954109\_-1827-Slc35b3 | chr13 | Slc35b3 | 0 | 0.729236718 | 0 | 1828 | 410 |
| chr13\_43096806\_43094749\_+2057-Phactr1 | chr13 | Phactr1 | 0.202796353 | 0 | 0 | 2058 | 405 |
| chr13\_43461823\_43434814\_-27009-Ranbp9 | chr13 | Ranbp9 | 0 | 0 | 0.361292045 | 27010 | 333 |
| chr13\_44982873\_44930996\_-51877-Dtnbp1 | chr13 | Dtnbp1 | 0 | 0 | 0.180646022 | 51878 | 445 |
| chr13\_44996006\_44970046\_-25960-Dtnbp1 | chr13 | Dtnbp1 | 0.405592706 | 0 | 0 | 25961 | 25961 |
| chr13\_45580326\_45566573\_-13753-Atxn1 | chr13 | Atxn1 | 0.202796353 | 0 | 0 | 13754 | 13754 |
| chr13\_45735178\_45697821\_-37357-Atxn1 | chr13 | Atxn1 | 0 | 0 | 0.361292045 | 37358 | 189 |
| chr13\_45795637\_45795509\_-128-Atxn1 | chr13 | Atxn1 | 0 | 0.911545897 | 0 | 129 | 129 |
| chr13\_45852456\_45795509\_-56947-Atxn1 | chr13 | Atxn1 | 0 | 0.09115459 | 0.180646022 | 56948 | 328 |
| chr13\_45956575\_45566573\_-390002-Atxn1 | chr13 | Atxn1 | 0.202796353 | 0 | 0 | 390003 | 2718 |
| chr13\_45956575\_45697821\_-258754-Atxn1 | chr13 | Atxn1 | 0 | 0 | 0.361292045 | 258755 | 710 |
| chr13\_45956575\_45743835\_-212740-Atxn1 | chr13 | Atxn1 | 0 | 0 | 0.180646022 | 212741 | 212741 |
| chr13\_45956575\_45795509\_-161066-Atxn1 | chr13 | Atxn1 | 0.811185411 | 0 | 0.722584089 | 161067 | 521 |
| chr13\_45956575\_45852328\_-104247-Atxn1 | chr13 | Atxn1 | 0.811185411 | 0 | 0.541938067 | 104248 | 392 |
| chr13\_45956575\_45956455\_-120-Atxn1 | chr13 | Atxn1 | 0 | 0.182309179 | 0 | 121 | 121 |
| chr13\_46640122\_46615250\_+24872-Cap2 | chr13 | Cap2 | 0 | 0.182309179 | 0 | 24873 | 676 |
| chr13\_46778993\_46760263\_-18730-Kif13a | chr13 | Kif13a | 0 | 0 | 0.180646022 | 18731 | 18731 |
| chr13\_46778993\_46761273\_-17720-Kif13a | chr13 | Kif13a | 0.202796353 | 0 | 0.541938067 | 17721 | 1215 |
| chr13\_46802729\_46780626\_-22103-Kif13a | chr13 | Kif13a | 0.405592706 | 0 | 0 | 22104 | 1475 |
| chr13\_46802729\_46785246\_-17483-Kif13a | chr13 | Kif13a | 0 | 0 | 0.180646022 | 17484 | 1436 |
| chr13\_46832816\_46823949\_-8867-Kif13a | chr13 | Kif13a | 0 | 0.182309179 | 0 | 8868 | 610 |
| chr13\_48506993\_48479843\_-27150-Zfp169 | chr13 | Zfp169 | 0.202796353 | 0 | 0 | 27151 | 27151 |
| chr13\_48902307\_48885273\_-17034-Fam120a | chr13 | Fam120a | 0.202796353 | 0 | 0 | 17035 | 1136 |
| chr13\_49085541\_49081904\_-3637-Wnk2 | chr13 | Wnk2 | 0 | 0 | 0.361292045 | 3638 | 492 |
| chr13\_49102962\_49100963\_-1999-Wnk2 | chr13 | Wnk2 | 0 | 0.182309179 | 0 | 2000 | 394 |
| chr13\_50276670\_50273334\_+3336-Gm31126 | chr13 | Gm31126 | 0.202796353 | 0 | 0 | 3337 | 410 |
| chr13\_51679953\_51678834\_+1119-Secisbp2 | chr13 | Secisbp2 | 0.608389058 | 0.546927538 | 0 | 1120 | 382 |
| chr13\_51682633\_51679733\_+2900-Secisbp2 | chr13 | Secisbp2 | 0 | 0.182309179 | 0 | 2901 | 2258 |
| chr13\_52919266\_52887241\_-32025-Auh | chr13 | Auh | 0.202796353 | 0 | 0.180646022 | 32026 | 547 |
| chr13\_54529223\_54523970\_+5253-Simc1 | chr13 | Simc1 | 0 | 0 | 0.180646022 | 5254 | 3021 |
| chr13\_54655577\_54641419\_+14158-Faf2 | chr13 | Faf2 | 0 | 0 | 0.180646022 | 14159 | 879 |
| chr13\_54655577\_54652043\_+3534-Faf2 | chr13 | Faf2 | 0.202796353 | 0 | 0.541938067 | 3535 | 350 |
| chr13\_54656425\_54638250\_+18175-Faf2 | chr13 | Faf2 | 0 | 0 | 0.180646022 | 18176 | 1092 |
| chr13\_55069807\_55034889\_-34918-Uimc1 | chr13 | Uimc1 | 0 | 0 | 0.361292045 | 34919 | 678 |
| chr13\_55248077\_55245518\_+2559-Nsd1 | chr13 | Nsd1 | 0.202796353 | 0.364618359 | 0.180646022 | 2560 | 2560 |
| chr13\_55263442\_55233895\_+29547-Nsd1 | chr13 | Nsd1 | 0 | 0 | 0.180646022 | 29548 | 3375 |
| chr13\_55451836\_55450928\_+908-Grk6 | chr13 | Grk6 | 0 | 0.182309179 | 0 | 909 | 392 |
| chr13\_55556225\_55552962\_-3263-Fam193b | chr13 | Fam193b | 0.202796353 | 0 | 0 | 3264 | 863 |
| chr13\_55936570\_55929539\_+7031-na | chr13 | na | 0 | 0.182309179 | 0 | 7032 | 7032 |
| chr13\_56039461\_55929539\_+109922-na | chr13 | na | 0 | 0.182309179 | 0 | 109923 | 109923 |
| chr13\_58199070\_58191722\_-7348-Ubqln1 | chr13 | Ubqln1 | 0 | 0.729236718 | 0.180646022 | 7349 | 934 |
| chr13\_59462173\_59460469\_-1704-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0 | 0.361292045 | 1705 | 338 |
| chr13\_59504310\_59473688\_-30622-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0.182309179 | 0 | 30623 | 1824 |
| chr13\_59514295\_59495333\_-18962-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0 | 0.180646022 | 18963 | 1611 |
| chr13\_59544451\_59460469\_-83982-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0 | 0.361292045 | 83983 | 3662 |
| chr13\_59544451\_59495333\_-49118-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0.364618359 | 0 | 49119 | 2494 |
| chr13\_59544451\_59512324\_-32127-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0 | 0.180646022 | 32128 | 1270 |
| chr13\_59555609\_59446917\_-108692-Agtpbp1 | chr13 | Agtpbp1 | 0 | 0.364618359 | 0 | 108693 | 108693 |
| chr13\_59800716\_59789848\_-10868-Zcchc6 | chr13 | Zcchc6 | 0 | 0.911545897 | 1.625814201 | 10869 | 1667 |
| chr13\_60854949\_60853100\_-1849-4930486L24Rik | chr13 | 4930486L24Rik | 0 | 0 | 0.722584089 | 1850 | 632 |
| chr13\_63210166\_63190479\_+19687-2010111I01Rik | chr13 | 2010111I01Rik | 0 | 0.182309179 | 0 | 19688 | 316 |
| chr13\_63872927\_63858231\_+14696-Ercc6l2 | chr13 | Ercc6l2 | 0 | 0.182309179 | 0 | 14697 | 1562 |
| chr13\_64247318\_64209107\_-38211-Cdc14b | chr13 | Cdc14b | 0.202796353 | 0 | 0 | 38212 | 1183 |
| chr13\_64248466\_64243634\_-4832-na | chr13 | na | 0 | 0.182309179 | 0 | 4833 | 4833 |
| chr13\_64248499\_64225572\_-22927-Cdc14b | chr13 | Cdc14b | 0 | 0 | 0.090323011 | 22928 | 432 |
| chr13\_64252756\_64209107\_-43649-Cdc14b | chr13 | Cdc14b | 0 | 0 | 0.361292045 | 43650 | 43650 |
| chr13\_6556702\_6552634\_+4068-Pitrm1 | chr13 | Pitrm1 | 0 | 0 | 0.541938067 | 4069 | 632 |
| chr13\_67494729\_67481170\_-13559-Zfp874b | chr13 | Zfp874b | 0 | 0.182309179 | 0 | 13560 | 13560 |
| chr13\_67711007\_67683403\_-27604-Zfp65 | chr13 | Zfp65 | 0 | 0.729236718 | 0 | 27605 | 27605 |
| chr13\_68796679\_68791278\_-5401-Adcy2 | chr13 | Adcy2 | 0 | 0.182309179 | 0 | 5402 | 5402 |
| chr13\_68796679\_68796530\_-149-Adcy2 | chr13 | Adcy2 | 0.202796353 | 0 | 0 | 150 | 150 |
| chr13\_70615113\_70592573\_-22540-Ice1 | chr13 | Ice1 | 0 | 0.182309179 | 0 | 22541 | 6010 |
| chr13\_74675906\_74671308\_+4598-Erap1 | chr13 | Erap1 | 0 | 0.182309179 | 0.180646022 | 4599 | 911 |
| chr13\_75615048\_75611887\_-3161-na | chr13 | na | 0 | 0 | 0.180646022 | 3162 | 3162 |
| chr13\_75913454\_75892906\_-20548-Rhobtb3 | chr13 | Rhobtb3 | 1.41957447 | 1.640782614 | 1.625814201 | 20549 | 712 |
| chr13\_75917847\_75892906\_-24941-Rhobtb3 | chr13 | Rhobtb3 | 0.202796353 | 0.729236718 | 0 | 24942 | 867 |
| chr13\_75939638\_75892906\_-46732-Rhobtb3 | chr13 | Rhobtb3 | 0 | 0.182309179 | 0 | 46733 | 1054 |
| chr13\_76113113\_76106230\_+6883-Ttc37 | chr13 | Ttc37 | 0 | 0 | 0.180646022 | 6884 | 552 |
| chr13\_76136474\_76127497\_+8977-Ttc37 | chr13 | Ttc37 | 0 | 0 | 0.180646022 | 8978 | 1413 |
| chr13\_76688630\_76641712\_+46918-Mctp1 | chr13 | Mctp1 | 0 | 0.364618359 | 0 | 46919 | 258 |
| chr13\_76759820\_76641712\_+118108-Mctp1 | chr13 | Mctp1 | 0 | 0.911545897 | 0 | 118109 | 899 |
| chr13\_76806262\_76641712\_+164550-Mctp1 | chr13 | Mctp1 | 0 | 0.182309179 | 0 | 164551 | 1180 |
| chr13\_77193223\_77183601\_+9622-2210408I21Rik | chr13 | 2210408I21Rik | 0 | 0 | 0.180646022 | 9623 | 839 |
| chr13\_83323951\_83315192\_-8759-Gm33217 | chr13 | Gm33217 | 0.202796353 | 0 | 0 | 8760 | 8760 |
| chr13\_83348892\_83321068\_-27824-Gm33217 | chr13 | Gm33217 | 0 | 0.364618359 | 0 | 27825 | 27825 |
| chr13\_83362820\_83323767\_-39053-na | chr13 | na | 0 | 0.182309179 | 0 | 39054 | 39054 |
| chr13\_83362820\_83347183\_-15637-Gm33217 | chr13 | Gm33217 | 0 | 0 | 0.180646022 | 15638 | 15638 |
| chr13\_83362820\_83347183\_-15637-na | chr13 | na | 0 | 0.182309179 | 0 | 15638 | 15638 |
| chr13\_83440017\_83427844\_-12173-Gm41010 | chr13 | Gm41010 | 0 | 0.182309179 | 0 | 12174 | 12174 |
| chr13\_83446420\_83427844\_-18576-Gm41010 | chr13 | Gm41010 | 0 | 0.182309179 | 0 | 18577 | 18577 |
| chr13\_83446420\_83439903\_-6517-Gm33274 | chr13 | Gm33274 | 0 | 0.182309179 | 0.180646022 | 6518 | 6518 |
| chr13\_83452301\_83427844\_-24457-na | chr13 | na | 0 | 0 | 0.180646022 | 24458 | 24458 |
| chr13\_83452301\_83439903\_-12398-Gm41010 | chr13 | Gm41010 | 0 | 0.273463769 | 0 | 12399 | 12399 |
| chr13\_83592981\_83575538\_+17443-Mef2c | chr13 | Mef2c | 0 | 0 | 0.180646022 | 17444 | 397 |
| chr13\_83635469\_83625470\_+9999-Mef2c | chr13 | Mef2c | 0.202796353 | 0 | 0.541938067 | 10000 | 373 |
| chr13\_8837023\_8835297\_-1726-Wdr37 | chr13 | Wdr37 | 0.608389058 | 0 | 0 | 1727 | 383 |
| chr13\_8849669\_8819863\_-29806-Wdr37 | chr13 | Wdr37 | 0.202796353 | 0 | 0 | 29807 | 963 |
| chr13\_8849669\_8835297\_-14372-Wdr37 | chr13 | Wdr37 | 0 | 0 | 0.361292045 | 14373 | 713 |
| chr13\_8861265\_8819863\_-41402-Wdr37 | chr13 | Wdr37 | 0.202796353 | 0 | 0 | 41403 | 1399 |
| chr13\_8861265\_8844787\_-16478-Wdr37 | chr13 | Wdr37 | 0.202796353 | 0 | 0 | 16479 | 689 |
| chr13\_91040988\_91022570\_-18418-Atg10 | chr13 | Atg10 | 0 | 0 | 0.090323011 | 18419 | 237 |
| chr13\_9145518\_9122108\_+23410-Larp4b | chr13 | Larp4b | 0 | 0 | 0.180646022 | 23411 | 690 |
| chr13\_92300358\_92256695\_-43663-Msh3 | chr13 | Msh3 | 0 | 0 | 0.180646022 | 43664 | 975 |
| chr13\_92312686\_92293474\_-19212-Msh3 | chr13 | Msh3 | 0 | 0 | 0.090323011 | 19213 | 19213 |
| chr13\_92312686\_92299153\_-13533-Msh3 | chr13 | Msh3 | 0 | 0 | 0.541938067 | 13534 | 423 |
| chr13\_92342412\_92285877\_-56535-Msh3 | chr13 | Msh3 | 0 | 0.182309179 | 0 | 56536 | 723 |
| chr13\_92345220\_92299153\_-46067-Msh3 | chr13 | Msh3 | 0.202796353 | 0 | 0 | 46068 | 855 |
| chr13\_93349297\_93341756\_+7541-Homer1 | chr13 | Homer1 | 0 | 0 | 0.361292045 | 7542 | 382 |
| chr13\_93393108\_93387524\_+5584-Homer1 | chr13 | Homer1 | 0.202796353 | 0.364618359 | 0.361292045 | 5585 | 349 |
| chr13\_93940708\_93939227\_+1481-Arsb | chr13 | Arsb | 0 | 0 | 0.180646022 | 1482 | 366 |
| chr13\_94233180\_94224895\_-8285-Scamp1 | chr13 | Scamp1 | 0.608389058 | 0.546927538 | 0 | 8286 | 497 |
| chr13\_94418143\_94394719\_+23424-Ap3b1 | chr13 | Ap3b1 | 0 | 0 | 0.180646022 | 23425 | 582 |
| chr13\_95005842\_94995250\_+10592-Wdr41 | chr13 | Wdr41 | 0 | 0.182309179 | 0 | 10593 | 356 |
| chr13\_9576918\_9560671\_+16247-Dip2c | chr13 | Dip2c | 0.202796353 | 0 | 0 | 16248 | 934 |
| chr13\_96504642\_96489182\_-15460-Polk | chr13 | Polk | 0.405592706 | 0.364618359 | 0 | 15461 | 948 |
| chr13\_9736882\_9720773\_-16109-Zmynd11 | chr13 | Zmynd11 | 0 | 0 | 0.180646022 | 16110 | 16110 |
| chr13\_9748797\_9720773\_-28024-Zmynd11 | chr13 | Zmynd11 | 0 | 0 | 0.270969033 | 28025 | 28025 |
| chr13\_98272852\_98266151\_+6701-Ankra2 | chr13 | Ankra2 | 0.405592706 | 0.364618359 | 0.361292045 | 6702 | 992 |
| chr13\_98272852\_98267316\_+5536-Ankra2 | chr13 | Ankra2 | 0.202796353 | 0.182309179 | 0 | 5537 | 597 |
| chr13\_99403582\_99362965\_+40617-Mrps27 | chr13 | Mrps27 | 0 | 0.09115459 | 0 | 40618 | 447 |
| chr13\_99415201\_99400262\_+14939-Mrps27 | chr13 | Mrps27 | 0.202796353 | 0 | 0 | 14940 | 1313 |
| chr14\_100109860\_100022622\_-87238-Klf12 | chr14 | Klf12 | 0 | 0.09115459 | 0 | 87239 | 791 |
| chr14\_101465764\_101447527\_-18237-Tbc1d4 | chr14 | Tbc1d4 | 0 | 0.182309179 | 0 | 18238 | 1481 |
| chr14\_101507690\_101501012\_-6678-Tbc1d4 | chr14 | Tbc1d4 | 0 | 0.364618359 | 0.180646022 | 6679 | 798 |
| chr14\_101888706\_101886937\_+1769-na | chr14 | na | 0.101398176 | 0 | 0 | 1770 | 1770 |
| chr14\_101914337\_101886937\_+27400-Lmo7 | chr14 | Lmo7 | 0.202796353 | 0 | 0 | 27401 | 2571 |
| chr14\_101929451\_101886937\_+42514-Lmo7 | chr14 | Lmo7 | 0 | 0 | 0.180646022 | 42515 | 3904 |
| chr14\_101932672\_101918612\_+14060-Lmo7 | chr14 | Lmo7 | 0.202796353 | 0 | 0 | 14061 | 1357 |
| chr14\_103252526\_103248362\_-4164-Mycbp2 | chr14 | Mycbp2 | 0.202796353 | 0 | 0 | 4165 | 323 |
| chr14\_103291362\_103182354\_-109008-Mycbp2 | chr14 | Mycbp2 | 0 | 0 | 0.180646022 | 109009 | 6302 |
| chr14\_106397826\_106360437\_+37389-Gm41240 | chr14 | Gm41240 | 0.202796353 | 0 | 0 | 37390 | 37390 |
| chr14\_118654374\_118627452\_-26922-Abcc4 | chr14 | Abcc4 | 0 | 0 | 0.180646022 | 26923 | 855 |
| chr14\_118669107\_118490499\_-178608-Abcc4 | chr14 | Abcc4 | 0 | 0.182309179 | 0 | 178609 | 3796 |
| chr14\_118669107\_118654150\_-14957-Abcc4 | chr14 | Abcc4 | 0.202796353 | 0 | 0 | 14958 | 457 |
| chr14\_118960860\_118953109\_+7751-Dnajc3 | chr14 | Dnajc3 | 0 | 0 | 0.361292045 | 7752 | 311 |
| chr14\_120325412\_120324794\_+618-Mbnl2 | chr14 | Mbnl2 | 0 | 0 | 0.361292045 | 619 | 619 |
| chr14\_120923585\_120917356\_+6229-Ipo5 | chr14 | Ipo5 | 0 | 0.364618359 | 0 | 6230 | 579 |
| chr14\_12110133\_12037341\_+72792-Ptprg | chr14 | Ptprg | 0 | 0.182309179 | 0 | 72793 | 321 |
| chr14\_121591948\_121591311\_-637-Dock9 | chr14 | Dock9 | 0 | 0.09115459 | 0 | 638 | 181 |
| chr14\_12166877\_12153658\_+13219-Ptprg | chr14 | Ptprg | 0.202796353 | 0 | 0 | 13220 | 902 |
| chr14\_121908320\_121905123\_+3197-Ubac2 | chr14 | Ubac2 | 0 | 0.546927538 | 0 | 3198 | 358 |
| chr14\_122370377\_122370119\_-258-na | chr14 | na | 0.202796353 | 0 | 0 | 259 | 259 |
| chr14\_122616885\_120379150\_+2237735-Ipo5 | chr14 | Ipo5 | 0.202796353 | 0 | 0 | 2237736 | longer than 2000000bp |
| chr14\_122714125\_122658678\_+55447-Pcca | chr14 | Pcca | 0 | 0 | 0.180646022 | 55448 | 927 |
| chr14\_122714125\_122684882\_+29243-Pcca | chr14 | Pcca | 0 | 0.182309179 | 0 | 29244 | 578 |
| chr14\_123827898\_123827752\_+146-Itgbl1 | chr14 | Itgbl1 | 0.202796353 | 0 | 0 | 147 | 147 |
| chr14\_13954656\_13951206\_-3450-Thoc7 | chr14 | Thoc7 | 0 | 0 | 0.180646022 | 3451 | 391 |
| chr14\_14053023\_13995007\_+58016-Atxn7 | chr14 | Atxn7 | 0 | 0.364618359 | 0 | 58017 | 560 |
| chr14\_14090109\_14087283\_+2826-Atxn7 | chr14 | Atxn7 | 0 | 0.364618359 | 0.180646022 | 2827 | 593 |
| chr14\_14103507\_14052919\_+50588-Atxn7 | chr14 | Atxn7 | 0 | 0.182309179 | 0 | 50589 | 2499 |
| chr14\_14104137\_14013073\_+91064-Atxn7 | chr14 | Atxn7 | 0 | 0 | 0.180646022 | 91065 | 3495 |
| chr14\_16283473\_16270475\_+12998-Ngly1 | chr14 | Ngly1 | 0 | 0.182309179 | 0 | 12999 | 768 |
| chr14\_16283473\_16277799\_+5674-Ngly1 | chr14 | Ngly1 | 0 | 0.182309179 | 0.180646022 | 5675 | 602 |
| chr14\_16294673\_16277799\_+16874-Ngly1 | chr14 | Ngly1 | 0 | 0 | 0.180646022 | 16875 | 953 |
| chr14\_16294673\_16280693\_+13980-Ngly1 | chr14 | Ngly1 | 0 | 0 | 0.180646022 | 13981 | 730 |
| chr14\_16294673\_16290771\_+3902-Ngly1 | chr14 | Ngly1 | 0 | 0 | 0.361292045 | 3903 | 351 |
| chr14\_16429432\_16408827\_+20605-Top2b | chr14 | Top2b | 0 | 0.364618359 | 0 | 20606 | 2483 |
| chr14\_18011270\_18008569\_+2701-Thrb | chr14 | Thrb | 0.405592706 | 0.182309179 | 0 | 2702 | 354 |
| chr14\_18222253\_18211779\_-10474-Nr1d2 | chr14 | Nr1d2 | 0 | 0.182309179 | 0 | 10475 | 1307 |
| chr14\_20307799\_20300587\_+7212-Nudt13 | chr14 | Nudt13 | 0.202796353 | 0 | 0 | 7213 | 607 |
| chr14\_20464946\_20460159\_-4787-Anxa7 | chr14 | Anxa7 | 0 | 0.182309179 | 0.180646022 | 4788 | 730 |
| chr14\_20501662\_20329954\_-171708-Cfap70 | chr14 | Cfap70 | 0 | 0 | 0.180646022 | 171709 | 171709 |
| chr14\_20562242\_20556247\_-5995-Usp54 | chr14 | Usp54 | 0.202796353 | 0 | 0 | 5996 | 1516 |
| chr14\_20757728\_20742705\_-15023-Camk2g | chr14 | Camk2g | 0 | 0.182309179 | 0 | 15024 | 303 |
| chr14\_20760480\_20653624\_-106856-Ndst2 | chr14 | Ndst2 | 0.405592706 | 0 | 0 | 106857 | 106857 |
| chr14\_20770129\_20760144\_-9985-Camk2g | chr14 | Camk2g | 0 | 0.182309179 | 0 | 9986 | 671 |
| chr14\_21318183\_21234833\_+83350-Adk | chr14 | Adk | 0 | 0 | 0.180646022 | 83351 | 453 |
| chr14\_21318183\_21240463\_+77720-Adk | chr14 | Adk | 0 | 0.364618359 | 0 | 77721 | 280 |
| chr14\_21517498\_21516626\_+872-Kat6b | chr14 | Kat6b | 0.608389058 | 0.546927538 | 0 | 873 | 873 |
| chr14\_21609862\_21516626\_+93236-Kat6b | chr14 | Kat6b | 0.202796353 | 0 | 0 | 93237 | 982 |
| chr14\_21637640\_21618891\_+18749-Kat6b | chr14 | Kat6b | 0.811185411 | 0.546927538 | 0.541938067 | 18750 | 1896 |
| chr14\_21637640\_21626719\_+10921-Kat6b | chr14 | Kat6b | 1.825167175 | 13.49087927 | 5.238734648 | 10922 | 636 |
| chr14\_21664748\_21626719\_+38029-Kat6b | chr14 | Kat6b | 0 | 0.182309179 | 0.090323011 | 38030 | 1712 |
| chr14\_23391007\_23330840\_-60167-Kcnma1 | chr14 | Kcnma1 | 0 | 0.182309179 | 0 | 60168 | 1049 |
| chr14\_23543106\_23435950\_-107156-Kcnma1 | chr14 | Kcnma1 | 0 | 0.182309179 | 0 | 107157 | 1296 |
| chr14\_25406932\_25406150\_-782-Zmiz1os1 | chr14 | Zmiz1os1 | 0 | 0.182309179 | 0 | 783 | 221 |
| chr14\_25581673\_25544786\_+36887-Zmiz1 | chr14 | Zmiz1 | 0.202796353 | 0 | 0.361292045 | 36888 | 36888 |
| chr14\_25636017\_25572020\_+63997-Zmiz1 | chr14 | Zmiz1 | 0.202796353 | 0 | 0 | 63998 | 474 |
| chr14\_26428316\_26414919\_-13397-Slmap | chr14 | Slmap | 0 | 0.182309179 | 0 | 13398 | 981 |
| chr14\_26428316\_26426565\_-1751-Slmap | chr14 | Slmap | 0 | 0 | 0.180646022 | 1752 | 514 |
| chr14\_26592437\_26585339\_+7098-Dennd6a | chr14 | Dennd6a | 0 | 0.09115459 | 0 | 7099 | 176 |
| chr14\_26606960\_26604674\_+2286-Dennd6a | chr14 | Dennd6a | 0.202796353 | 0 | 0.541938067 | 2287 | 199 |
| chr14\_26901225\_26900847\_+378-Asb14 | chr14 | Asb14 | 0 | 0 | 0.361292045 | 379 | 291 |
| chr14\_26914330\_26900847\_+13483-Asb14 | chr14 | Asb14 | 0 | 0.364618359 | 0 | 13484 | 1407 |
| chr14\_26958511\_26949442\_-9069-Appl1 | chr14 | Appl1 | 0 | 0.182309179 | 0 | 9070 | 637 |
| chr14\_27777242\_27776159\_+1083-Erc2 | chr14 | Erc2 | 0 | 0 | 0.361292045 | 1084 | 441 |
| chr14\_30787607\_30765963\_+21644-Sfmbt1 | chr14 | Sfmbt1 | 0.202796353 | 0 | 0 | 21645 | 1153 |
| chr14\_30790816\_30765963\_+24853-Sfmbt1 | chr14 | Sfmbt1 | 0.202796353 | 0 | 0 | 24854 | 1236 |
| chr14\_30975827\_30963933\_+11894-Nek4 | chr14 | Nek4 | 0 | 0 | 0.180646022 | 11895 | 905 |
| chr14\_31040531\_31030844\_+9687-Pbrm1 | chr14 | Pbrm1 | 0 | 0 | 0.180646022 | 9688 | 577 |
| chr14\_31074982\_31061469\_+13513-Pbrm1 | chr14 | Pbrm1 | 0 | 0.182309179 | 0 | 13514 | 1238 |
| chr14\_31089622\_31061469\_+28153-Pbrm1 | chr14 | Pbrm1 | 0.608389058 | 0.364618359 | 0.180646022 | 28154 | 2150 |
| chr14\_31089622\_31061525\_+28097-Pbrm1 | chr14 | Pbrm1 | 0 | 0 | 0.722584089 | 28098 | 2094 |
| chr14\_31185425\_31184942\_-483-Nisch | chr14 | Nisch | 0 | 0.729236718 | 0 | 484 | 223 |
| chr14\_31191548\_31184942\_-6606-Nisch | chr14 | Nisch | 0 | 0 | 0.180646022 | 6607 | 1119 |
| chr14\_31248134\_31241726\_-6408-Phf7 | chr14 | Phf7 | 0 | 0 | 0.722584089 | 6409 | 194 |
| chr14\_31366243\_31355265\_+10978-Capn7 | chr14 | Capn7 | 0 | 0.364618359 | 0 | 10979 | 1141 |
| chr14\_31369851\_31363479\_+6372-Capn7 | chr14 | Capn7 | 0 | 0 | 0.180646022 | 6373 | 797 |
| chr14\_31492456\_31482791\_-9665-Mettl6 | chr14 | Mettl6 | 0 | 0 | 0.361292045 | 9666 | 448 |
| chr14\_32552710\_32526149\_+26561-Ercc6 | chr14 | Ercc6 | 0.202796353 | 0.364618359 | 1.625814201 | 26562 | 1154 |
| chr14\_32563569\_32557839\_+5730-Ercc6 | chr14 | Ercc6 | 0 | 0 | 0.180646022 | 5731 | 5731 |
| chr14\_32650933\_32650671\_-262-na | chr14 | na | 0 | 0.182309179 | 0 | 263 | 263 |
| chr14\_34429800\_34422560\_-7240-Bmpr1a | chr14 | Bmpr1a | 0 | 0.364618359 | 0 | 7241 | 636 |
| chr14\_34460612\_34441099\_-19513-Bmpr1a | chr14 | Bmpr1a | 0 | 0.182309179 | 0 | 19514 | 587 |
| chr14\_34552322\_34541868\_-10454-Ldb3 | chr14 | Ldb3 | 0 | 0.182309179 | 0 | 10455 | 893 |
| chr14\_34567567\_34566857\_-710-Ldb3 | chr14 | Ldb3 | 0 | 0 | 0.180646022 | 711 | 207 |
| chr14\_34571921\_34566857\_-5064-Ldb3 | chr14 | Ldb3 | 0 | 0 | 0.361292045 | 5065 | 426 |
| chr14\_34695105\_34691682\_+3423-Wapl | chr14 | Wapl | 0 | 0 | 0.361292045 | 3424 | 1172 |
| chr14\_45340691\_45330987\_+9704-Psmc6 | chr14 | Psmc6 | 0 | 0.182309179 | 0 | 9705 | 426 |
| chr14\_45343727\_45334653\_+9074-Psmc6 | chr14 | Psmc6 | 0 | 0.182309179 | 0 | 9075 | 721 |
| chr14\_45629750\_45614163\_-15587-Ddhd1 | chr14 | Ddhd1 | 0.202796353 | 0 | 0 | 15588 | 764 |
| chr14\_46097166\_46082710\_-14456-na | chr14 | na | 0 | 0.546927538 | 0 | 14457 | 14457 |
| chr14\_46727661\_46718453\_-9208-na | chr14 | na | 0.202796353 | 0 | 0 | 9209 | 9209 |
| chr14\_46917051\_46908987\_+8064-na | chr14 | na | 0 | 0.182309179 | 0.180646022 | 8065 | 8065 |
| chr14\_47016795\_46896018\_+120777-Samd4 | chr14 | Samd4 | 0.405592706 | 0 | 0.180646022 | 120778 | 120778 |
| chr14\_47016795\_46907915\_+108880-Samd4 | chr14 | Samd4 | 0.202796353 | 0 | 0.541938067 | 108881 | 108881 |
| chr14\_47026840\_47016277\_+10563-Samd4 | chr14 | Samd4 | 0 | 0 | 0.180646022 | 10564 | 10564 |
| chr14\_47053113\_47016277\_+36836-Samd4 | chr14 | Samd4 | 0 | 0.182309179 | 0 | 36837 | 933 |
| chr14\_47083615\_47064220\_+19395-Samd4 | chr14 | Samd4 | 0.405592706 | 0 | 0 | 19396 | 715 |
| chr14\_47083615\_47073836\_+9779-Samd4 | chr14 | Samd4 | 0 | 0 | 0.180646022 | 9780 | 518 |
| chr14\_47089170\_47073836\_+15334-Samd4 | chr14 | Samd4 | 0 | 0 | 0.180646022 | 15335 | 847 |
| chr14\_47096174\_47073836\_+22338-Samd4 | chr14 | Samd4 | 0 | 0.182309179 | 0 | 22339 | 931 |
| chr14\_47673070\_47663756\_+9314-Ktn1 | chr14 | Ktn1 | 0 | 0.364618359 | 0 | 9315 | 1003 |
| chr14\_47693943\_47683383\_+10560-Ktn1 | chr14 | Ktn1 | 0 | 0.364618359 | 0 | 10561 | 762 |
| chr14\_50935359\_50929575\_+5784-na | chr14 | na | 0 | 0 | 0.180646022 | 5785 | 5785 |
| chr14\_52176513\_52170827\_-5686-Supt16 | chr14 | Supt16 | 0 | 0 | 0.180646022 | 5687 | 1149 |
| chr14\_54667161\_54662168\_-4993-Acin1 | chr14 | Acin1 | 1.216778117 | 0.364618359 | 0.361292045 | 4994 | 1687 |
| chr14\_54679352\_54662168\_-17184-Acin1 | chr14 | Acin1 | 0 | 0 | 0.361292045 | 17185 | 1919 |
| chr14\_54991994\_54963896\_-28098-Myh7 | chr14 | Myh7 | 0 | 0 | 0.180646022 | 28099 | 28099 |
| chr14\_57450741\_57444355\_+6386-Ift88 | chr14 | Ift88 | 0 | 0.182309179 | 0 | 6387 | 521 |
| chr14\_57734418\_57733878\_-540-Lats2 | chr14 | Lats2 | 0 | 0 | 0.361292045 | 541 | 541 |
| chr14\_57878459\_57856610\_-21849-Zdhhc20 | chr14 | Zdhhc20 | 0 | 0.546927538 | 0 | 21850 | 476 |
| chr14\_59419561\_59406646\_-12915-Setdb2-phf11c | chr14 | Setdb2-phf11c | 0 | 0 | 0.361292045 | 12916 | 1671 |
| chr14\_59431268\_59406646\_-24622-Setdb2-phf11c | chr14 | Setdb2-phf11c | 0 | 0.182309179 | 0 | 24623 | 1960 |
| chr14\_59539205\_59504451\_+34754-Cab39l | chr14 | Cab39l | 0.202796353 | 0 | 0 | 34755 | 34755 |
| chr14\_61193479\_61189602\_+3877-Sacs | chr14 | Sacs | 0 | 0 | 0.722584089 | 3878 | 1734 |
| chr14\_61236895\_61225195\_-11700-Sgcg | chr14 | Sgcg | 0.202796353 | 0.182309179 | 0 | 11701 | 405 |
| chr14\_64757584\_64746299\_+11285-Kif13b | chr14 | Kif13b | 0.202796353 | 0 | 0 | 11286 | 1162 |
| chr14\_64757584\_64748446\_+9138-Kif13b | chr14 | Kif13b | 0.202796353 | 0 | 0 | 9139 | 760 |
| chr14\_64779768\_64748446\_+31322-Kif13b | chr14 | Kif13b | 0 | 0 | 0.180646022 | 31323 | 2134 |
| chr14\_64788519\_64748446\_+40073-Kif13b | chr14 | Kif13b | 0.608389058 | 0.911545897 | 0.722584089 | 40074 | 2300 |
| chr14\_64791074\_64776237\_+14837-Kif13b | chr14 | Kif13b | 0 | 0.364618359 | 0 | 14838 | 14838 |
| chr14\_64800407\_64748446\_+51961-Kif13b | chr14 | Kif13b | 0 | 0 | 0.180646022 | 51962 | 2497 |
| chr14\_65080475\_65075584\_-4891-Extl3 | chr14 | Extl3 | 0.202796353 | 0 | 0 | 4892 | 2702 |
| chr14\_67390566\_67371693\_+18873-Ebf2 | chr14 | Ebf2 | 0 | 0 | 0.361292045 | 18874 | 458 |
| chr14\_67729733\_67724558\_+5175-Kctd9 | chr14 | Kctd9 | 0 | 0 | 0.361292045 | 5176 | 578 |
| chr14\_69798324\_69793904\_-4420-Rhobtb2 | chr14 | Rhobtb2 | 0 | 0 | 0.361292045 | 4421 | 1475 |
| chr14\_69851754\_69847483\_+4271-Pebp4 | chr14 | Pebp4 | 1.216778117 | 0 | 0 | 4272 | 336 |
| chr14\_70142531\_70141611\_-920-Ccar2 | chr14 | Ccar2 | 0.202796353 | 0.364618359 | 0 | 921 | 637 |
| chr14\_70152757\_70151880\_-877-Ccar2 | chr14 | Ccar2 | 0.202796353 | 0 | 0 | 878 | 278 |
| chr14\_70267506\_70256360\_-11146-Ppp3cc | chr14 | Ppp3cc | 0 | 0 | 0.361292045 | 11147 | 435 |
| chr14\_70707433\_70701693\_-5740-Xpo7 | chr14 | Xpo7 | 0.811185411 | 0.182309179 | 0.180646022 | 5741 | 501 |
| chr14\_70707433\_70701720\_-5713-Xpo7 | chr14 | Xpo7 | 0.811185411 | 1.093855076 | 0.541938067 | 5714 | 474 |
| chr14\_72683771\_72599066\_-84705-Fndc3a | chr14 | Fndc3a | 0 | 0.09115459 | 0 | 84706 | 291 |
| chr14\_74796091\_74775581\_-20510-Lrch1 | chr14 | Lrch1 | 0 | 0 | 0.180646022 | 20511 | 639 |
| chr14\_75294002\_75291569\_+2433-Zc3h13 | chr14 | Zc3h13 | 0.202796353 | 0 | 0.180646022 | 2434 | 348 |
| chr14\_75316078\_75291572\_+24506-Zc3h13 | chr14 | Zc3h13 | 0 | 0 | 0.180646022 | 24507 | 950 |
| chr14\_75328144\_75291569\_+36575-Zc3h13 | chr14 | Zc3h13 | 0 | 0.182309179 | 0 | 36576 | 2705 |
| chr14\_78589981\_78569904\_-20077-Dgkh | chr14 | Dgkh | 0.202796353 | 0 | 0 | 20078 | 1334 |
| chr14\_78947272\_78933666\_+13606-Vwa8 | chr14 | Vwa8 | 0 | 0 | 0.180646022 | 13607 | 561 |
| chr14\_78995163\_78933666\_+61497-Vwa8 | chr14 | Vwa8 | 0 | 0 | 0.361292045 | 61498 | 1296 |
| chr14\_79009279\_78982236\_+27043-Vwa8 | chr14 | Vwa8 | 0 | 0.364618359 | 0 | 27044 | 638 |
| chr14\_79018713\_78933666\_+85047-Vwa8 | chr14 | Vwa8 | 0 | 0 | 0.180646022 | 85048 | 1519 |
| chr14\_79020686\_78933666\_+87020-Vwa8 | chr14 | Vwa8 | 0 | 0 | 0.180646022 | 87021 | 1626 |
| chr14\_79026077\_78933666\_+92411-Vwa8 | chr14 | Vwa8 | 0.405592706 | 0 | 0.180646022 | 92412 | 1698 |
| chr14\_79026077\_79009164\_+16913-Vwa8 | chr14 | Vwa8 | 0 | 0.182309179 | 0.180646022 | 16914 | 402 |
| chr14\_79065005\_79056647\_+8358-Vwa8 | chr14 | Vwa8 | 0.405592706 | 0 | 0 | 8359 | 690 |
| chr14\_79065005\_79058673\_+6332-Vwa8 | chr14 | Vwa8 | 0.202796353 | 0 | 0.180646022 | 6333 | 614 |
| chr14\_79098429\_79064854\_+33575-Vwa8 | chr14 | Vwa8 | 0 | 0.182309179 | 0 | 33576 | 1363 |
| chr14\_79103696\_79056647\_+47049-Vwa8 | chr14 | Vwa8 | 0 | 0.364618359 | 0 | 47050 | 2188 |
| chr14\_79103696\_79086620\_+17076-Vwa8 | chr14 | Vwa8 | 0.202796353 | 0 | 0.361292045 | 17077 | 1250 |
| chr14\_7915384\_7907153\_+8231-Flnb | chr14 | Flnb | 0 | 0.364618359 | 0 | 8232 | 790 |
| chr14\_79387106\_79381495\_-5611-Naa16 | chr14 | Naa16 | 0 | 0.182309179 | 0.361292045 | 5612 | 483 |
| chr14\_79573618\_79567150\_+6468-Elf1 | chr14 | Elf1 | 0 | 0 | 0.180646022 | 6469 | 889 |
| chr14\_79580789\_79580185\_+604-na | chr14 | na | 0 | 0 | 0.180646022 | 605 | 605 |
| chr14\_8141544\_8136869\_+4675-Pxk | chr14 | Pxk | 0 | 0.364618359 | 0 | 4676 | 434 |
| chr14\_87480883\_87472076\_+8807-Tdrd3 | chr14 | Tdrd3 | 0 | 0.182309179 | 0 | 8808 | 525 |
| chr14\_87506606\_87472076\_+34530-Tdrd3 | chr14 | Tdrd3 | 0 | 0 | 0.180646022 | 34531 | 1797 |
| chr14\_87511770\_87472076\_+39694-Tdrd3 | chr14 | Tdrd3 | 0 | 0 | 0.180646022 | 39695 | 1923 |
| chr14\_97969968\_97827742\_-142226-Dach1 | chr14 | Dach1 | 0.202796353 | 0 | 0 | 142227 | 1275 |
| chr14\_99156619\_99133236\_+23383-Pibf1 | chr14 | Pibf1 | 0 | 0.364618359 | 0 | 23384 | 708 |
| chr14\_99211070\_99179315\_+31755-Pibf1 | chr14 | Pibf1 | 0 | 0.364618359 | 0 | 31756 | 642 |
| chr14\_99211070\_99186481\_+24589-Pibf1 | chr14 | Pibf1 | 0 | 0 | 0.180646022 | 24590 | 476 |
| chr15\_100412262\_100395270\_-16992-Slc11a2 | chr15 | Slc11a2 | 0 | 0.364618359 | 0 | 16993 | 1667 |
| chr15\_100476886\_100469685\_+7201-Letmd1 | chr15 | Letmd1 | 1.013981764 | 0 | 0.541938067 | 7202 | 890 |
| chr15\_100525672\_100520563\_-5109-Tfcp2 | chr15 | Tfcp2 | 0 | 0.546927538 | 0 | 5110 | 366 |
| chr15\_101195057\_101193932\_+1125-Acvr1b | chr15 | Acvr1b | 0.202796353 | 0 | 0 | 1126 | 489 |
| chr15\_101202145\_101198784\_+3361-Acvr1b | chr15 | Acvr1b | 0.811185411 | 0.546927538 | 0.541938067 | 3362 | 399 |
| chr15\_101204577\_101193932\_+10645-Acvr1b | chr15 | Acvr1b | 0.202796353 | 0.729236718 | 0.361292045 | 10646 | 1170 |
| chr15\_101204577\_101198784\_+5793-Acvr1b | chr15 | Acvr1b | 0.608389058 | 0.182309179 | 0.903230112 | 5794 | 681 |
| chr15\_101211402\_101193932\_+17470-Acvr1b | chr15 | Acvr1b | 0 | 0.182309179 | 0 | 17471 | 1967 |
| chr15\_102087219\_102084161\_+3058-Eif4b | chr15 | Eif4b | 0.202796353 | 0 | 0 | 3059 | 3059 |
| chr15\_102547872\_102538183\_-9689-Atf7 | chr15 | Atf7 | 0.202796353 | 0 | 0 | 9690 | 674 |
| chr15\_12140652\_12136396\_+4256-Zfr | chr15 | Zfr | 0 | 0.182309179 | 0 | 4257 | 647 |
| chr15\_12154565\_12136396\_+18169-Zfr | chr15 | Zfr | 0.608389058 | 0 | 0 | 18170 | 1696 |
| chr15\_12171854\_12136396\_+35458-Zfr | chr15 | Zfr | 0.405592706 | 0 | 0 | 35459 | 2698 |
| chr15\_12180940\_12136396\_+44544-Zfr | chr15 | Zfr | 0 | 0.364618359 | 0 | 44545 | 2908 |
| chr15\_12184166\_12136396\_+47770-Zfr | chr15 | Zfr | 0.405592706 | 0 | 0 | 47771 | 3116 |
| chr15\_12445665\_12406467\_-39198-Pdzd2 | chr15 | Pdzd2 | 0 | 0 | 0.180646022 | 39199 | 928 |
| chr15\_12867670\_12859373\_+8297-Drosha | chr15 | Drosha | 0 | 0.182309179 | 0 | 8298 | 403 |
| chr15\_12905701\_12889619\_+16082-Drosha | chr15 | Drosha | 0.202796353 | 0.182309179 | 0 | 16083 | 571 |
| chr15\_12926309\_12912511\_+13798-na | chr15 | na | 0 | 0 | 0.180646022 | 13799 | 13799 |
| chr15\_25744256\_25737450\_+6806-Myo10 | chr15 | Myo10 | 0 | 0.182309179 | 0 | 6807 | 435 |
| chr15\_25786046\_25782918\_+3128-Myo10 | chr15 | Myo10 | 0 | 0.364618359 | 0 | 3129 | 368 |
| chr15\_27571654\_27562724\_+8930-Ank | chr15 | Ank | 0 | 0 | 0.722584089 | 8931 | 495 |
| chr15\_27905331\_27897834\_-7497-Trio | chr15 | Trio | 0.608389058 | 0.182309179 | 0 | 7498 | 1021 |
| chr15\_28007495\_27995081\_-12414-Trio | chr15 | Trio | 0 | 0.182309179 | 0 | 12415 | 12415 |
| chr15\_32271404\_32269683\_+1721-Sema5a | chr15 | Sema5a | 0 | 0.182309179 | 0 | 1722 | 1722 |
| chr15\_33250133\_33233664\_+16469-Cpq | chr15 | Cpq | 0 | 0 | 0.180646022 | 16470 | 16470 |
| chr15\_3333525\_3325898\_-7627-Ghr | chr15 | Ghr | 0 | 0 | 0.541938067 | 7628 | 439 |
| chr15\_3347601\_3327974\_-19627-Ghr | chr15 | Ghr | 0 | 0.364618359 | 0 | 19628 | 675 |
| chr15\_34123766\_34114024\_+9742-Mtdh | chr15 | Mtdh | 0 | 0 | 0.361292045 | 9743 | 748 |
| chr15\_34139897\_34117880\_+22017-Mtdh | chr15 | Mtdh | 0.202796353 | 0 | 0 | 22018 | 951 |
| chr15\_34355685\_34355563\_+122-Matn2 | chr15 | Matn2 | 0 | 0 | 0.180646022 | 123 | 123 |
| chr15\_35438978\_35417511\_+21467-Vps13b | chr15 | Vps13b | 0 | 0 | 0.180646022 | 21468 | 912 |
| chr15\_3551685\_3388648\_-163037-Ghr | chr15 | Ghr | 0.202796353 | 1.093855076 | 0 | 163038 | 163038 |
| chr15\_3551685\_3457930\_-93755-Ghr | chr15 | Ghr | 0.202796353 | 0 | 0 | 93756 | 93756 |
| chr15\_35534360\_35417511\_+116849-Vps13b | chr15 | Vps13b | 0 | 0.182309179 | 0 | 116850 | 2530 |
| chr15\_35576526\_35533296\_+43230-Vps13b | chr15 | Vps13b | 0 | 0 | 0.180646022 | 43231 | 567 |
| chr15\_3559042\_3544025\_-15017-na | chr15 | na | 0 | 0 | 0.361292045 | 15018 | 15018 |
| chr15\_3560054\_3544025\_-16029-na | chr15 | na | 0.202796353 | 0 | 0.180646022 | 16030 | 16030 |
| chr15\_3560054\_3551533\_-8521-na | chr15 | na | 0 | 0 | 0.180646022 | 8522 | 8522 |
| chr15\_35623805\_35616040\_+7765-Vps13b | chr15 | Vps13b | 0 | 0 | 0.180646022 | 7766 | 7766 |
| chr15\_35623805\_35617598\_+6207-Vps13b | chr15 | Vps13b | 0.202796353 | 0 | 0 | 6208 | 425 |
| chr15\_35674952\_35668701\_+6251-Vps13b | chr15 | Vps13b | 0 | 0.364618359 | 0 | 6252 | 475 |
| chr15\_35834380\_35665215\_+169165-Vps13b | chr15 | Vps13b | 0.405592706 | 0 | 0 | 169166 | 169166 |
| chr15\_37989652\_37972903\_-16749-Ubr5 | chr15 | Ubr5 | 0.405592706 | 1.640782614 | 1.445168179 | 16750 | 1958 |
| chr15\_38048149\_36596563\_-1451586-Ubr5 | chr15 | Ubr5 | 0.202796353 | 0 | 0 | 1451587 | 1451587 |
| chr15\_38048149\_38037816\_-10333-Ubr5 | chr15 | Ubr5 | 0 | 0.182309179 | 0 | 10334 | 1036 |
| chr15\_4057775\_4047465\_+10310-Oxct1 | chr15 | Oxct1 | 0.202796353 | 0 | 0 | 10311 | 393 |
| chr15\_4101879\_4091168\_+10711-Oxct1 | chr15 | Oxct1 | 0.202796353 | 0 | 0 | 10712 | 516 |
| chr15\_41826052\_41797474\_+28578-Oxr1 | chr15 | Oxr1 | 0.608389058 | 0.364618359 | 1.083876134 | 28579 | 1715 |
| chr15\_42530710\_42512284\_-18426-Angpt1 | chr15 | Angpt1 | 0 | 0 | 0.180646022 | 18427 | 361 |
| chr15\_43513849\_43492170\_+21679-Emc2 | chr15 | Emc2 | 0 | 0.182309179 | 0 | 21680 | 767 |
| chr15\_44405992\_44380060\_-25932-Nudcd1 | chr15 | Nudcd1 | 0.202796353 | 0 | 0 | 25933 | 1186 |
| chr15\_44405992\_44388469\_-17523-Nudcd1 | chr15 | Nudcd1 | 0 | 0.182309179 | 0 | 17524 | 1026 |
| chr15\_44405992\_44396511\_-9481-Nudcd1 | chr15 | Nudcd1 | 0 | 0 | 0.180646022 | 9482 | 900 |
| chr15\_48874558\_48874167\_+391-na | chr15 | na | 0 | 0.182309179 | 0 | 392 | 392 |
| chr15\_50831958\_50822105\_-9853-Trps1 | chr15 | Trps1 | 0.202796353 | 0 | 0 | 9854 | 1734 |
| chr15\_55218273\_55208731\_+9542-Deptor | chr15 | Deptor | 0.608389058 | 0 | 0 | 9543 | 497 |
| chr15\_58055082\_58031984\_-23098-Zhx1 | chr15 | Zhx1 | 0.202796353 | 0 | 0 | 23099 | 23099 |
| chr15\_58055082\_58051606\_-3476-Zhx1 | chr15 | Zhx1 | 0 | 0.182309179 | 0 | 3477 | 3477 |
| chr15\_58055082\_58052224\_-2858-Zhx1 | chr15 | Zhx1 | 0.202796353 | 0.364618359 | 0.722584089 | 2859 | 2859 |
| chr15\_58064180\_58052224\_-11956-Zhx1 | chr15 | Zhx1 | 0.202796353 | 0.182309179 | 0 | 11957 | 2985 |
| chr15\_58208067\_58191285\_-16782-Fbxo32 | chr15 | Fbxo32 | 0 | 0 | 0.180646022 | 16783 | 535 |
| chr15\_58208067\_58205213\_-2854-Fbxo32 | chr15 | Fbxo32 | 0 | 0 | 0.180646022 | 2855 | 256 |
| chr15\_58342570\_58341988\_+582-na | chr15 | na | 0 | 0.182309179 | 0.180646022 | 583 | 583 |
| chr15\_60955192\_60953306\_+1886-4930402D18Rik | chr15 | 4930402D18Rik | 0 | 0.09115459 | 0 | 1887 | 258 |
| chr15\_60967345\_60953306\_+14039-4930402D18Rik | chr15 | 4930402D18Rik | 0 | 0.273463769 | 0 | 14040 | 14040 |
| chr15\_61043354\_60927962\_+115392-4930402D18Rik | chr15 | 4930402D18Rik | 0 | 0 | 0.180646022 | 115393 | 115393 |
| chr15\_62107465\_62102345\_+5120-Pvt1 | chr15 | Pvt1 | 0.202796353 | 0 | 0.180646022 | 5121 | 5121 |
| chr15\_64152930\_64135806\_-17124-Asap1 | chr15 | Asap1 | 0 | 0.364618359 | 0 | 17125 | 308 |
| chr15\_64166545\_64124315\_-42230-Asap1 | chr15 | Asap1 | 0 | 0 | 0.180646022 | 42231 | 1265 |
| chr15\_65848309\_65829727\_+18582-Efr3a | chr15 | Efr3a | 0.405592706 | 0.364618359 | 0 | 18583 | 665 |
| chr15\_66632901\_66594807\_+38094-Phf20l1 | chr15 | Phf20l1 | 0.202796353 | 0.182309179 | 0 | 38095 | 5229 |
| chr15\_66637032\_66604027\_+33005-Phf20l1 | chr15 | Phf20l1 | 0.202796353 | 0.364618359 | 0 | 33006 | 5142 |
| chr15\_6745580\_6735365\_+10215-Rictor | chr15 | Rictor | 0 | 0 | 0.180646022 | 10216 | 295 |
| chr15\_68224943\_68165753\_-59190-Zfat | chr15 | Zfat | 0 | 0 | 0.361292045 | 59191 | 2853 |
| chr15\_6842917\_6836916\_-6001-Osmr | chr15 | Osmr | 0 | 0 | 0.361292045 | 6002 | 582 |
| chr15\_72946185\_72936962\_-9223-Trappc9 | chr15 | Trappc9 | 0 | 0.182309179 | 0 | 9224 | 424 |
| chr15\_72953119\_72925506\_-27613-Trappc9 | chr15 | Trappc9 | 0 | 0.182309179 | 0 | 27614 | 809 |
| chr15\_73276913\_73215979\_-60934-Ptk2 | chr15 | Ptk2 | 0 | 0.182309179 | 0 | 60935 | 1553 |
| chr15\_73343359\_73325749\_-17610-Ptk2 | chr15 | Ptk2 | 0 | 0.364618359 | 0 | 17611 | 482 |
| chr15\_75670184\_75667420\_-2764-Top1mt | chr15 | Top1mt | 0.202796353 | 0 | 0 | 2765 | 786 |
| chr15\_76348004\_76347664\_-340-Sharpin | chr15 | Sharpin | 0.202796353 | 0 | 0 | 341 | 263 |
| chr15\_76601337\_76600938\_-399-Cpsf1 | chr15 | Cpsf1 | 0.202796353 | 0 | 0 | 400 | 246 |
| chr15\_77102939\_77091812\_-11127-na | chr15 | na | 0 | 0.09115459 | 0 | 11128 | 11128 |
| chr15\_77102939\_77094607\_-8332-Rbfox2 | chr15 | Rbfox2 | 0 | 0.182309179 | 0 | 8333 | 8333 |
| chr15\_77102939\_77097940\_-4999-Rbfox2 | chr15 | Rbfox2 | 0 | 0.182309179 | 0 | 5000 | 353 |
| chr15\_77104780\_77091812\_-12968-Rbfox2 | chr15 | Rbfox2 | 0.405592706 | 0 | 0 | 12969 | 12969 |
| chr15\_77813231\_77807868\_-5363-Myh9 | chr15 | Myh9 | 0 | 0 | 0.180646022 | 5364 | 509 |
| chr15\_78055722\_78044130\_+11592-LOC108168245 | chr15 | LOC108168245 | 0 | 0.182309179 | 0 | 11593 | 11593 |
| chr15\_78191638\_78191473\_+165-na | chr15 | na | 0.608389058 | 0 | 0 | 166 | 166 |
| chr15\_78202653\_78201226\_-1427-Pvalb | chr15 | Pvalb | 0.202796353 | 0 | 0 | 1428 | 243 |
| chr15\_79374184\_79363658\_-10526-Tmem184b | chr15 | Tmem184b | 0 | 0.182309179 | 0 | 10527 | 10527 |
| chr15\_79542586\_79541034\_-1552-Ddx17 | chr15 | Ddx17 | 0 | 0.182309179 | 0 | 1553 | 234 |
| chr15\_79708043\_79706992\_+1051-Gtpbp1 | chr15 | Gtpbp1 | 0.202796353 | 0 | 0 | 1052 | 530 |
| chr15\_79824880\_79824599\_+281-na | chr15 | na | 0.202796353 | 0 | 0 | 282 | 282 |
| chr15\_80890276\_80884207\_+6069-Tnrc6b | chr15 | Tnrc6b | 0.202796353 | 0 | 0 | 6070 | 6070 |
| chr15\_80894454\_80878867\_+15587-Tnrc6b | chr15 | Tnrc6b | 0.202796353 | 0.182309179 | 0 | 15588 | 3059 |
| chr15\_80894454\_80884207\_+10247-Tnrc6b | chr15 | Tnrc6b | 0.202796353 | 0 | 0 | 10248 | 560 |
| chr15\_80918097\_80884207\_+33890-Tnrc6b | chr15 | Tnrc6b | 0 | 0.364618359 | 0.180646022 | 33891 | 1446 |
| chr15\_81438180\_81430690\_+7490-Xpnpep3 | chr15 | Xpnpep3 | 0.202796353 | 0 | 0.180646022 | 7491 | 380 |
| chr15\_81601545\_81600908\_+637-Ep300 | chr15 | Ep300 | 0 | 0 | 0.180646022 | 638 | 638 |
| chr15\_81611523\_81610355\_+1168-Ep300 | chr15 | Ep300 | 0 | 0 | 0.541938067 | 1169 | 376 |
| chr15\_81627534\_81624525\_+3009-Ep300 | chr15 | Ep300 | 0 | 0.182309179 | 0 | 3010 | 680 |
| chr15\_81722026\_81716567\_-5459-Rangap1 | chr15 | Rangap1 | 0.405592706 | 0 | 0 | 5460 | 503 |
| chr15\_81823653\_81814944\_+8709-Tef | chr15 | Tef | 0 | 0.182309179 | 0 | 8710 | 844 |
| chr15\_83924461\_83879431\_-45030-Efcab6 | chr15 | Efcab6 | 0 | 0.182309179 | 0 | 45031 | 1401 |
| chr15\_84176876\_84171082\_+5794-Pnpla3 | chr15 | Pnpla3 | 0.202796353 | 0 | 0 | 5795 | 570 |
| chr15\_84181052\_84171082\_+9970-Pnpla3 | chr15 | Pnpla3 | 0 | 0.364618359 | 0 | 9971 | 1063 |
| chr15\_84186081\_84171082\_+14999-Pnpla3 | chr15 | Pnpla3 | 0.202796353 | 0.729236718 | 0.361292045 | 15000 | 1168 |
| chr15\_84206941\_84195744\_+11197-Samm50 | chr15 | Samm50 | 0.202796353 | 0 | 0 | 11198 | 986 |
| chr15\_84955491\_84953130\_-2361-5031439G07Rik | chr15 | 5031439G07Rik | 0 | 0 | 0.180646022 | 2362 | 435 |
| chr15\_89096819\_89094137\_+2682-Selo | chr15 | Selo | 0.202796353 | 0 | 0 | 2683 | 599 |
| chr15\_89101916\_89101153\_-763-Tubgcp6 | chr15 | Tubgcp6 | 0.202796353 | 0 | 0.180646022 | 764 | 470 |
| chr15\_89109056\_89101153\_-7903-Tubgcp6 | chr15 | Tubgcp6 | 0 | 0.546927538 | 0 | 7904 | 3316 |
| chr15\_89253261\_89246258\_+7003-Ppp6r2 | chr15 | Ppp6r2 | 0 | 0.182309179 | 0.180646022 | 7004 | 326 |
| chr15\_89262568\_89253019\_+9549-Ppp6r2 | chr15 | Ppp6r2 | 0 | 0.182309179 | 0 | 9550 | 784 |
| chr15\_89294071\_89293945\_-126-Sbf1 | chr15 | Sbf1 | 0 | 0.364618359 | 0 | 127 | 127 |
| chr15\_89306293\_89305544\_-749-Sbf1 | chr15 | Sbf1 | 0.202796353 | 0 | 0 | 750 | 306 |
| chr15\_89352527\_89351983\_-544-Lmf2 | chr15 | Lmf2 | 0 | 0.729236718 | 0 | 545 | 378 |
| chr15\_90995633\_90990247\_-5386-Kif21a | chr15 | Kif21a | 0 | 0.364618359 | 0.180646022 | 5387 | 5387 |
| chr15\_9103379\_9100106\_+3273-Nadk2 | chr15 | Nadk2 | 0 | 0.364618359 | 0 | 3274 | 206 |
| chr15\_91780009\_91772822\_+7187-Lrrk2 | chr15 | Lrrk2 | 0 | 0 | 0.180646022 | 7188 | 631 |
| chr15\_91814733\_91786966\_+27767-Lrrk2 | chr15 | Lrrk2 | 0.709787235 | 1.002700487 | 0 | 27768 | 3775 |
| chr15\_91814733\_91786966\_+27767-na | chr15 | na | 0 | 0 | 0.361292045 | 27768 | 27768 |
| chr15\_93441712\_93424014\_+17698-Pphln1 | chr15 | Pphln1 | 0.405592706 | 0 | 0 | 17699 | 274 |
| chr15\_93465245\_93452117\_+13128-Pphln1 | chr15 | Pphln1 | 0 | 0 | 0.180646022 | 13129 | 398 |
| chr15\_94333725\_94324660\_-9065-Adamts20 | chr15 | Adamts20 | 0 | 0.182309179 | 0 | 9066 | 1514 |
| chr15\_95920378\_95864225\_+56153-Ano6 | chr15 | Ano6 | 0 | 1.823091794 | 1.806460223 | 56154 | 928 |
| chr15\_95931843\_95864225\_+67618-Ano6 | chr15 | Ano6 | 0 | 0 | 0.180646022 | 67619 | 1095 |
| chr15\_95931843\_95912305\_+19538-Ano6 | chr15 | Ano6 | 0.202796353 | 0 | 0 | 19539 | 883 |
| chr15\_95931843\_95913372\_+18471-Ano6 | chr15 | Ano6 | 0.202796353 | 0 | 0 | 18472 | 817 |
| chr15\_95949956\_95948272\_+1684-Ano6 | chr15 | Ano6 | 0.405592706 | 0 | 0 | 1685 | 494 |
| chr15\_96370194\_96356693\_+13501-Arid2 | chr15 | Arid2 | 0 | 0 | 0.180646022 | 13502 | 1769 |
| chr15\_97019861\_97005820\_-14041-Slc38a4 | chr15 | Slc38a4 | 0 | 0.182309179 | 0 | 14042 | 1318 |
| chr15\_97811628\_97810853\_-775-Hdac7 | chr15 | Hdac7 | 0 | 0 | 0.180646022 | 776 | 394 |
| chr15\_98122915\_98121197\_+1718-na | chr15 | na | 0 | 0 | 0.090323011 | 1719 | 1719 |
| chr15\_98563873\_98528018\_+35855-na | chr15 | na | 0 | 0.182309179 | 0 | 35856 | 35856 |
| chr15\_98604735\_98592127\_-12608-Adcy6 | chr15 | Adcy6 | 0 | 0 | 0.361292045 | 12609 | 3967 |
| chr16\_10513287\_10506196\_+7091-Ciita | chr16 | Ciita | 0.202796353 | 0 | 0 | 7092 | 2221 |
| chr16\_10638915\_10611003\_+27912-Clec16a | chr16 | Clec16a | 0 | 0.364618359 | 0 | 27913 | 692 |
| chr16\_10694790\_10611003\_+83787-Clec16a | chr16 | Clec16a | 0 | 0.364618359 | 0 | 83788 | 1341 |
| chr16\_10742931\_10741614\_+1317-na | chr16 | na | 0.202796353 | 0 | 0.180646022 | 1318 | 1318 |
| chr16\_11128703\_11093816\_-34887-Txndc11 | chr16 | Txndc11 | 0.202796353 | 0 | 0 | 34888 | 652 |
| chr16\_11420783\_11370803\_+49980-Snx29 | chr16 | Snx29 | 0 | 0.455772948 | 0 | 49981 | 49981 |
| chr16\_11447508\_11445165\_+2343-Snx29 | chr16 | Snx29 | 0.101398176 | 0.09115459 | 0 | 2344 | 193 |
| chr16\_11660627\_11639374\_+21253-Snx29 | chr16 | Snx29 | 0 | 1.093855076 | 0 | 21254 | 21254 |
| chr16\_13628449\_13566570\_-61879-Parn | chr16 | Parn | 0.202796353 | 0 | 0 | 61880 | 644 |
| chr16\_13647299\_13603028\_-44271-Parn | chr16 | Parn | 0 | 0.182309179 | 0 | 44272 | 697 |
| chr16\_13800016\_13790621\_+9395-Rrn3 | chr16 | Rrn3 | 0.202796353 | 0 | 0 | 9396 | 596 |
| chr16\_13811609\_13810504\_+1105-Rrn3 | chr16 | Rrn3 | 0 | 0 | 0.722584089 | 1106 | 241 |
| chr16\_13872523\_13854395\_-18128-Pdxdc1 | chr16 | Pdxdc1 | 0 | 0 | 0.541938067 | 18129 | 561 |
| chr16\_14140372\_14127056\_-13316-Marf1 | chr16 | Marf1 | 0.405592706 | 0 | 0 | 13317 | 1684 |
| chr16\_14413382\_14403990\_+9392-Abcc1 | chr16 | Abcc1 | 0 | 0 | 0.180646022 | 9393 | 768 |
| chr16\_14413382\_14410700\_+2682-Abcc1 | chr16 | Abcc1 | 0.202796353 | 0 | 0 | 2683 | 574 |
| chr16\_14423260\_14389807\_+33453-Abcc1 | chr16 | Abcc1 | 0 | 0.182309179 | 0 | 33454 | 1632 |
| chr16\_14423260\_14403990\_+19270-Abcc1 | chr16 | Abcc1 | 0 | 0 | 0.361292045 | 19271 | 1065 |
| chr16\_14423260\_14410700\_+12560-Abcc1 | chr16 | Abcc1 | 0.405592706 | 0 | 0 | 12561 | 871 |
| chr16\_14445469\_14436507\_+8962-Abcc1 | chr16 | Abcc1 | 0 | 0.182309179 | 0.361292045 | 8963 | 612 |
| chr16\_14461208\_14436507\_+24701-Abcc1 | chr16 | Abcc1 | 0.202796353 | 0 | 0 | 24702 | 1701 |
| chr16\_14461208\_14445293\_+15915-Abcc1 | chr16 | Abcc1 | 0.202796353 | 0 | 0 | 15916 | 1266 |
| chr16\_15706978\_15697123\_+9855-Prkdc | chr16 | Prkdc | 0 | 0 | 0.180646022 | 9856 | 919 |
| chr16\_15719512\_15648720\_+70792-Prkdc | chr16 | Prkdc | 0 | 0 | 0.180646022 | 70793 | 5072 |
| chr16\_15816894\_15799867\_+17027-Prkdc | chr16 | Prkdc | 0.202796353 | 0 | 0.180646022 | 17028 | 1342 |
| chr16\_15904261\_15902909\_-1352-Spidr | chr16 | Spidr | 0 | 0 | 0.180646022 | 1353 | 352 |
| chr16\_15915387\_15912519\_-2868-Spidr | chr16 | Spidr | 0 | 0.182309179 | 0 | 2869 | 289 |
| chr16\_16475161\_16469704\_-5457-Fgd4 | chr16 | Fgd4 | 0 | 0.182309179 | 0 | 5458 | 442 |
| chr16\_17026489\_17023452\_+3037-Mapk1 | chr16 | Mapk1 | 0 | 0.182309179 | 0 | 3038 | 364 |
| chr16\_17356216\_17348715\_-7501-Pi4ka | chr16 | Pi4ka | 0.405592706 | 0 | 0 | 7502 | 737 |
| chr16\_20107643\_20101992\_+5651-Klhl24 | chr16 | Klhl24 | 0 | 0 | 0.361292045 | 5652 | 1044 |
| chr16\_20123152\_20101992\_+21160-Klhl24 | chr16 | Klhl24 | 0 | 0 | 0.361292045 | 21161 | 1973 |
| chr16\_20357558\_20338876\_-18682-Abcc5 | chr16 | Abcc5 | 0 | 0 | 0.361292045 | 18683 | 429 |
| chr16\_20400039\_20362182\_-37857-Abcc5 | chr16 | Abcc5 | 0 | 0 | 0.180646022 | 37858 | 3105 |
| chr16\_23970073\_23968307\_-1766-Bcl6 | chr16 | Bcl6 | 0.405592706 | 0 | 0 | 1767 | 299 |
| chr16\_23978589\_23974813\_-3776-Bcl6 | chr16 | Bcl6 | 0.405592706 | 0.182309179 | 0 | 3777 | 433 |
| chr16\_24456942\_24442416\_+14526-Lpp | chr16 | Lpp | 0.202796353 | 0.182309179 | 0.180646022 | 14527 | 14527 |
| chr16\_24559657\_24555505\_+4152-Lpp | chr16 | Lpp | 0.405592706 | 0 | 0 | 4153 | 4153 |
| chr16\_24889959\_24761593\_+128366-Lpp | chr16 | Lpp | 0 | 0.182309179 | 0 | 128367 | 981 |
| chr16\_24889959\_24845091\_+44868-Lpp | chr16 | Lpp | 0.202796353 | 0 | 0 | 44869 | 297 |
| chr16\_25764296\_25763266\_+1030-Trp63 | chr16 | Trp63 | 0 | 0 | 0.361292045 | 1031 | 262 |
| chr16\_29293538\_29266944\_-26594-Atp13a5 | chr16 | Atp13a5 | 0 | 0.182309179 | 0 | 26595 | 754 |
| chr16\_29298254\_29232320\_-65934-Atp13a5 | chr16 | Atp13a5 | 0 | 0.364618359 | 0 | 65935 | 2260 |
| chr16\_29298254\_29293421\_-4833-Atp13a5 | chr16 | Atp13a5 | 0.304194529 | 0 | 0 | 4834 | 362 |
| chr16\_31127433\_31116002\_-11431-Acap2 | chr16 | Acap2 | 0 | 0 | 0.361292045 | 11432 | 393 |
| chr16\_31805734\_31796866\_+8868-Dlg1 | chr16 | Dlg1 | 0 | 0 | 0.361292045 | 8869 | 266 |
| chr16\_31812824\_31805614\_+7210-Dlg1 | chr16 | Dlg1 | 0.202796353 | 0 | 0 | 7211 | 278 |
| chr16\_31990465\_31977680\_-12785-Senp5 | chr16 | Senp5 | 0.202796353 | 0 | 0.541938067 | 12786 | 1897 |
| chr16\_32033899\_32027712\_-6187-Pak2 | chr16 | Pak2 | 0.608389058 | 0 | 0.180646022 | 6188 | 331 |
| chr16\_32044000\_32033787\_-10213-Pak2 | chr16 | Pak2 | 0 | 0 | 0.541938067 | 10214 | 647 |
| chr16\_32844706\_32833644\_-11062-Rubcn | chr16 | Rubcn | 0 | 0.182309179 | 0 | 11063 | 1243 |
| chr16\_32961744\_32952057\_+9687-Lrch3 | chr16 | Lrch3 | 0.202796353 | 0.364618359 | 0.180646022 | 9688 | 480 |
| chr16\_33206002\_33204672\_+1330-Osbpl11 | chr16 | Osbpl11 | 0 | 0.182309179 | 0.180646022 | 1331 | 256 |
| chr16\_33216859\_33209926\_+6933-Osbpl11 | chr16 | Osbpl11 | 0 | 0.182309179 | 0 | 6934 | 525 |
| chr16\_33216859\_33214342\_+2517-Osbpl11 | chr16 | Osbpl11 | 0 | 0.364618359 | 0 | 2518 | 348 |
| chr16\_33236408\_33234423\_+1985-Osbpl11 | chr16 | Osbpl11 | 0 | 0 | 0.722584089 | 1986 | 337 |
| chr16\_33468183\_33466855\_+1328-Zfp148 | chr16 | Zfp148 | 0.405592706 | 0.546927538 | 0.361292045 | 1329 | 208 |
| chr16\_33865652\_33706916\_+158736-Heg1 | chr16 | Heg1 | 0 | 0.182309179 | 0 | 158737 | 158737 |
| chr16\_35735651\_35719312\_-16339-Dirc2 | chr16 | Dirc2 | 0.202796353 | 0 | 0 | 16340 | 701 |
| chr16\_36919796\_36904553\_+15243-Golgb1 | chr16 | Golgb1 | 0.405592706 | 0 | 0 | 15244 | 7206 |
| chr16\_36978778\_36968827\_-9951-Fbxo40 | chr16 | Fbxo40 | 0.202796353 | 0 | 0 | 9952 | 1947 |
| chr16\_37567391\_37559995\_+7396-Rabl3 | chr16 | Rabl3 | 0.202796353 | 0 | 0 | 7397 | 338 |
| chr16\_37878564\_37877049\_+1515-Lrrc58 | chr16 | Lrrc58 | 0 | 0.182309179 | 0 | 1516 | 407 |
| chr16\_3919564\_3911451\_+8113-Cluap1 | chr16 | Cluap1 | 0 | 0 | 0.180646022 | 8114 | 557 |
| chr16\_3942121\_3937559\_+4562-na | chr16 | na | 0.304194529 | 0 | 0 | 4563 | 4563 |
| chr16\_4125762\_4107428\_-18334-Crebbp | chr16 | Crebbp | 0 | 0 | 0.180646022 | 18335 | 1881 |
| chr16\_4155033\_4137366\_-17667-Crebbp | chr16 | Crebbp | 0 | 0.546927538 | 0.361292045 | 17668 | 532 |
| chr16\_4180133\_4154857\_-25276-Crebbp | chr16 | Crebbp | 0 | 0.182309179 | 0 | 25277 | 887 |
| chr16\_4312789\_4304377\_-8412-Adcy9 | chr16 | Adcy9 | 0.202796353 | 0 | 0 | 8413 | 692 |
| chr16\_43462986\_43024938\_+438048-na | chr16 | na | 0 | 0.09115459 | 0 | 438049 | 438049 |
| chr16\_43610931\_43609327\_+1604-Zbtb20 | chr16 | Zbtb20 | 0.405592706 | 0 | 0 | 1605 | 1605 |
| chr16\_44205080\_44200614\_+4466-Usf3 | chr16 | Usf3 | 0.506990882 | 0.273463769 | 0.361292045 | 4467 | 177 |
| chr16\_44521335\_44520225\_-1110-Boc | chr16 | Boc | 0 | 0.182309179 | 0 | 1111 | 456 |
| chr16\_4493880\_4482538\_-11342-Srl | chr16 | Srl | 0.202796353 | 0 | 0 | 11343 | 1296 |
| chr16\_4911468\_4907365\_+4103-Mgrn1 | chr16 | Mgrn1 | 0.202796353 | 0 | 0 | 4104 | 358 |
| chr16\_4953954\_4942211\_-11743-Anks3 | chr16 | Anks3 | 0.202796353 | 0 | 0 | 11744 | 3672 |
| chr16\_50280539\_50274547\_-5992-Bbx | chr16 | Bbx | 0 | 0.364618359 | 0 | 5993 | 414 |
| chr16\_5173166\_5171861\_+1305-Sec14l5 | chr16 | Sec14l5 | 0.202796353 | 0.364618359 | 0 | 1306 | 303 |
| chr16\_5180897\_5180216\_+681-Sec14l5 | chr16 | Sec14l5 | 0.202796353 | 0 | 0.361292045 | 682 | 526 |
| chr16\_5180897\_5180394\_+503-Sec14l5 | chr16 | Sec14l5 | 0.202796353 | 0 | 0 | 504 | 371 |
| chr16\_52166351\_52164296\_+2055-Cblb | chr16 | Cblb | 0.202796353 | 0 | 0 | 2056 | 549 |
| chr16\_52194278\_52152511\_+41767-Cblb | chr16 | Cblb | 0 | 0.364618359 | 0 | 41768 | 1486 |
| chr16\_52194278\_52174354\_+19924-Cblb | chr16 | Cblb | 0.202796353 | 0 | 0.180646022 | 19925 | 733 |
| chr16\_52194278\_52183212\_+11066-Cblb | chr16 | Cblb | 0.202796353 | 0 | 0 | 11067 | 638 |
| chr16\_55819706\_55812635\_-7071-Nfkbiz | chr16 | Nfkbiz | 0 | 0.182309179 | 0 | 7072 | 1996 |
| chr16\_55982406\_55980595\_+1811-Zbtb11 | chr16 | Zbtb11 | 0 | 0.182309179 | 0 | 1812 | 468 |
| chr16\_56002826\_55990259\_+12567-Zbtb11 | chr16 | Zbtb11 | 0 | 0.364618359 | 0 | 12568 | 1522 |
| chr16\_56166012\_56138985\_+27027-Senp7 | chr16 | Senp7 | 0 | 0.182309179 | 0 | 27028 | 1148 |
| chr16\_56596836\_56586929\_+9907-Abi3bp | chr16 | Abi3bp | 0.811185411 | 0 | 0.722584089 | 9908 | 583 |
| chr16\_57513444\_57506599\_+6845-Filip1l | chr16 | Filip1l | 0.202796353 | 0 | 0.361292045 | 6846 | 609 |
| chr16\_57572425\_57569650\_+2775-na | chr16 | na | 2.433556234 | 2.187710153 | 3.612920447 | 2776 | 2776 |
| chr16\_58493861\_58484763\_-9098-St3gal6 | chr16 | St3gal6 | 0 | 0.364618359 | 0 | 9099 | 428 |
| chr16\_58507614\_58472311\_-35303-St3gal6 | chr16 | St3gal6 | 0 | 0 | 0.361292045 | 35304 | 1169 |
| chr16\_58507614\_58484763\_-22851-St3gal6 | chr16 | St3gal6 | 0.608389058 | 2.187710153 | 3.251628402 | 22852 | 595 |
| chr16\_58507614\_58507236\_-378-na | chr16 | na | 0 | 0.09115459 | 0 | 379 | 379 |
| chr16\_59489433\_59480291\_+9142-Mina | chr16 | Mina | 0.405592706 | 0 | 0 | 9143 | 597 |
| chr16\_59524970\_59503125\_-21845-Crybg3 | chr16 | Crybg3 | 0.202796353 | 0 | 0 | 21846 | 504 |
| chr16\_59544165\_59522084\_-22081-Crybg3 | chr16 | Crybg3 | 0.202796353 | 0 | 0 | 22082 | 1095 |
| chr16\_59560242\_59552172\_-8070-Crybg3 | chr16 | Crybg3 | 0 | 0 | 0.180646022 | 8071 | 6297 |
| chr16\_59565643\_59550402\_-15241-Crybg3 | chr16 | Crybg3 | 0.202796353 | 0 | 0 | 15242 | 6876 |
| chr16\_65839733\_65828059\_+11674-Vgll3 | chr16 | Vgll3 | 0.405592706 | 0 | 0 | 11675 | 643 |
| chr16\_65839733\_65839209\_+524-Vgll3 | chr16 | Vgll3 | 0 | 0.182309179 | 0 | 525 | 525 |
| chr16\_70441319\_70424167\_+17152-Gbe1 | chr16 | Gbe1 | 0 | 0.729236718 | 0 | 17153 | 17153 |
| chr16\_70441319\_70433545\_+7774-Gbe1 | chr16 | Gbe1 | 0 | 0.364618359 | 0.180646022 | 7775 | 563 |
| chr16\_70495399\_70478306\_+17093-Gbe1 | chr16 | Gbe1 | 0 | 0.182309179 | 0.180646022 | 17094 | 626 |
| chr16\_7224550\_7224311\_+239-Rbfox1 | chr16 | Rbfox1 | 0 | 0.546927538 | 0 | 240 | 240 |
| chr16\_7277168\_7224311\_+52857-Rbfox1 | chr16 | Rbfox1 | 0 | 0.182309179 | 0 | 52858 | 384 |
| chr16\_7306461\_7285478\_+20983-Rbfox1 | chr16 | Rbfox1 | 0 | 0.182309179 | 0 | 20984 | 262 |
| chr16\_7375969\_7224311\_+151658-Rbfox1 | chr16 | Rbfox1 | 0.405592706 | 0 | 0 | 151659 | 1008 |
| chr16\_7375969\_7352932\_+23037-Rbfox1 | chr16 | Rbfox1 | 0 | 0.364618359 | 0 | 23038 | 281 |
| chr16\_7392040\_7352932\_+39108-Rbfox1 | chr16 | Rbfox1 | 0.405592706 | 0.729236718 | 0.180646022 | 39109 | 334 |
| chr16\_7409768\_7224311\_+185457-Rbfox1 | chr16 | Rbfox1 | 0.304194529 | 0.364618359 | 0.180646022 | 185458 | 2390 |
| chr16\_77596959\_77594622\_+2337-na | chr16 | na | 0 | 0 | 0.180646022 | 2338 | 2338 |
| chr16\_78941804\_78941225\_+579-Chodl | chr16 | Chodl | 0 | 0.182309179 | 0 | 580 | 468 |
| chr16\_85043743\_85013627\_-30116-App | chr16 | App | 0.405592706 | 0 | 0.180646022 | 30117 | 822 |
| chr16\_85465691\_85103206\_-362485-App | chr16 | App | 0.405592706 | 0 | 0 | 362486 | 362486 |
| chr16\_87483016\_87475417\_+7599-Usp16 | chr16 | Usp16 | 0 | 0 | 0.180646022 | 7600 | 1234 |
| chr16\_87722608\_87715331\_+7277-Bach1 | chr16 | Bach1 | 0.202796353 | 0 | 0.722584089 | 7278 | 1845 |
| chr16\_87758413\_87755016\_+3397-Gm32925 | chr16 | Gm32925 | 0.405592706 | 0.364618359 | 0 | 3398 | 488 |
| chr16\_87767062\_87755016\_+12046-na | chr16 | na | 0 | 0.09115459 | 0 | 12047 | 12047 |
| chr16\_8889631\_8879745\_+9886-Gm30310 | chr16 | Gm30310 | 0 | 0 | 0.180646022 | 9887 | 9887 |
| chr16\_90252450\_90249627\_-2823-Scaf4 | chr16 | Scaf4 | 0 | 0 | 0.180646022 | 2824 | 773 |
| chr16\_90475982\_90447310\_+28672-Hunk | chr16 | Hunk | 0 | 0 | 0.180646022 | 28673 | 619 |
| chr16\_90969374\_90946792\_-22582-Synj1 | chr16 | Synj1 | 0 | 0 | 0.090323011 | 22583 | 2045 |
| chr16\_91793767\_91782161\_+11606-Itsn1 | chr16 | Itsn1 | 0 | 0.364618359 | 0 | 11607 | 378 |
| chr16\_91812153\_91781778\_+30375-Itsn1 | chr16 | Itsn1 | 0.405592706 | 0 | 0 | 30376 | 30376 |
| chr16\_91812153\_91801527\_+10626-Itsn1 | chr16 | Itsn1 | 0 | 0 | 0.180646022 | 10627 | 442 |
| chr16\_91820819\_91801527\_+19292-Itsn1 | chr16 | Itsn1 | 0 | 0.182309179 | 0 | 19293 | 1247 |
| chr16\_91820819\_91815402\_+5417-Itsn1 | chr16 | Itsn1 | 0 | 0.182309179 | 0 | 5418 | 805 |
| chr16\_91926982\_91926459\_-523-Atp5o | chr16 | Atp5o | 0 | 0.546927538 | 0 | 524 | 243 |
| chr16\_93764044\_93762033\_+2011-Dopey2 | chr16 | Dopey2 | 0.202796353 | 0.182309179 | 0.180646022 | 2012 | 1104 |
| chr16\_93766316\_93762033\_+4283-Dopey2 | chr16 | Dopey2 | 0.405592706 | 0 | 0 | 4284 | 1396 |
| chr16\_93774109\_93769394\_+4715-Dopey2 | chr16 | Dopey2 | 0 | 0.182309179 | 0.180646022 | 4716 | 1934 |
| chr16\_93780812\_93769394\_+11418-Dopey2 | chr16 | Dopey2 | 0 | 0 | 0.180646022 | 11419 | 2323 |
| chr16\_93781724\_93769394\_+12330-na | chr16 | na | 0.101398176 | 0 | 0 | 12331 | 12331 |
| chr16\_93793231\_93769394\_+23837-Dopey2 | chr16 | Dopey2 | 0.405592706 | 0 | 0 | 23838 | 2752 |
| chr16\_93806471\_93801561\_+4910-na | chr16 | na | 0 | 0.09115459 | 0 | 4911 | 4911 |
| chr16\_93809421\_93803462\_+5959-Dopey2 | chr16 | Dopey2 | 0.202796353 | 0 | 0.180646022 | 5960 | 1834 |
| chr16\_93853898\_93849130\_+4768-Morc3 | chr16 | Morc3 | 0.608389058 | 0.364618359 | 0 | 4769 | 397 |
| chr16\_97870280\_97868592\_-1688-C2cd2 | chr16 | C2cd2 | 0.608389058 | 0.546927538 | 0 | 1689 | 453 |
| chr16\_97872383\_97868592\_-3791-na | chr16 | na | 0 | 0.182309179 | 0 | 3792 | 3792 |
| chr16\_97912704\_97909762\_-2942-C2cd2 | chr16 | C2cd2 | 0 | 0 | 0.180646022 | 2943 | 2943 |
| chr17\_10274063\_10273947\_-116-Qk | chr17 | Qk | 0 | 0.364618359 | 0 | 117 | 117 |
| chr17\_10738983\_10736076\_-2907-na | chr17 | na | 0 | 0.364618359 | 0 | 2908 | 2908 |
| chr17\_11303711\_11067129\_+236582-Park2 | chr17 | Park2 | 0.405592706 | 0 | 0 | 236583 | 527 |
| chr17\_11434633\_11067129\_+367504-Park2 | chr17 | Park2 | 0 | 0 | 0.180646022 | 367505 | 611 |
| chr17\_12272220\_12270863\_-1357-Map3k4 | chr17 | Map3k4 | 0 | 0 | 0.180646022 | 1358 | 1358 |
| chr17\_12714140\_12705688\_-8452-Igf2r | chr17 | Igf2r | 0 | 0.182309179 | 0 | 8453 | 748 |
| chr17\_12714140\_12712019\_-2121-Igf2r | chr17 | Igf2r | 0 | 0.182309179 | 0 | 2122 | 282 |
| chr17\_12719950\_12713961\_-5989-Igf2r | chr17 | Igf2r | 0.405592706 | 0 | 0 | 5990 | 1208 |
| chr17\_13829023\_13818121\_+10902-Mllt4 | chr17 | Mllt4 | 0 | 0 | 0.361292045 | 10903 | 578 |
| chr17\_13859976\_13832368\_+27608-Mllt4 | chr17 | Mllt4 | 0 | 0 | 0.541938067 | 27609 | 1432 |
| chr17\_14375519\_14344327\_+31192-na | chr17 | na | 0.101398176 | 0 | 0 | 31193 | 31193 |
| chr17\_15131489\_15120593\_-10896-na | chr17 | na | 0 | 0.364618359 | 0 | 10897 | 10897 |
| chr17\_15234002\_15154790\_-79212-Gm5091 | chr17 | Gm5091 | 0 | 0.546927538 | 0 | 79213 | 79213 |
| chr17\_15269931\_15232159\_-37772-Gm5091 | chr17 | Gm5091 | 0 | 0 | 0.180646022 | 37773 | 37773 |
| chr17\_15743230\_15742157\_+1073-Chd1 | chr17 | Chd1 | 0 | 0.364618359 | 0 | 1074 | 316 |
| chr17\_17390064\_17377719\_+12345-Riok2 | chr17 | Riok2 | 0 | 0 | 0.180646022 | 12346 | 1413 |
| chr17\_17579372\_17529701\_-49671-Lnpep | chr17 | Lnpep | 0.811185411 | 0 | 0 | 49672 | 3107 |
| chr17\_24100908\_24088004\_-12904-Pdpk1 | chr17 | Pdpk1 | 0 | 0 | 0.180646022 | 12905 | 732 |
| chr17\_24100908\_24091421\_-9487-Pdpk1 | chr17 | Pdpk1 | 0.202796353 | 0 | 0 | 9488 | 514 |
| chr17\_24436324\_24433133\_+3191-Eci1 | chr17 | Eci1 | 0 | 0 | 0.180646022 | 3192 | 275 |
| chr17\_24437610\_24436178\_+1432-Eci1 | chr17 | Eci1 | 0 | 0.182309179 | 0 | 1433 | 448 |
| chr17\_24445551\_24445446\_-105-E4f1 | chr17 | E4f1 | 0 | 0.182309179 | 0 | 106 | 106 |
| chr17\_25213106\_25199767\_+13339-Unkl | chr17 | Unkl | 0 | 0 | 0.903230112 | 13340 | 793 |
| chr17\_25218755\_25199767\_+18988-Unkl | chr17 | Unkl | 1.216778117 | 0 | 0.180646022 | 18989 | 971 |
| chr17\_25381573\_25380225\_-1348-Cacna1h | chr17 | Cacna1h | 0.811185411 | 0 | 0 | 1349 | 467 |
| chr17\_25830061\_25829785\_+276-Jmjd8 | chr17 | Jmjd8 | 0 | 0 | 0.180646022 | 277 | 189 |
| chr17\_26024466\_26013774\_-10692-Rab11fip3 | chr17 | Rab11fip3 | 0.202796353 | 0 | 0 | 10693 | 448 |
| chr17\_26027779\_26026130\_-1649-Rab11fip3 | chr17 | Rab11fip3 | 0.202796353 | 0 | 0 | 1650 | 1650 |
| chr17\_26641704\_26634417\_+7287-Ergic1 | chr17 | Ergic1 | 0 | 0.182309179 | 0 | 7288 | 390 |
| chr17\_26743131\_26736789\_+6342-Crebrf | chr17 | Crebrf | 2.636352587 | 1.458473435 | 0.541938067 | 6343 | 1411 |
| chr17\_26743131\_26736816\_+6315-Crebrf | chr17 | Crebrf | 0.608389058 | 0 | 0 | 6316 | 1384 |
| chr17\_26743131\_26739543\_+3588-Crebrf | chr17 | Crebrf | 6.286686938 | 4.557729485 | 8.129071005 | 3589 | 1216 |
| chr17\_29850688\_29849157\_-1531-Mdga1 | chr17 | Mdga1 | 0.202796353 | 0 | 0 | 1532 | 600 |
| chr17\_30530365\_30524713\_-5652-Btbd9 | chr17 | Btbd9 | 0 | 0.182309179 | 0 | 5653 | 841 |
| chr17\_30885534\_30513556\_-371978-Glo1 | chr17 | Glo1 | 0 | 0 | 0.903230112 | 371979 | 371979 |
| chr17\_30923856\_30511699\_-412157-Glo1 | chr17 | Glo1 | 0 | 0.364618359 | 0 | 412158 | 412158 |
| chr17\_30923856\_30513556\_-410300-Glo1 | chr17 | Glo1 | 0 | 2.370019332 | 0.903230112 | 410301 | 410301 |
| chr17\_31602862\_31592105\_+10757-Pknox1 | chr17 | Pknox1 | 0 | 0.182309179 | 0 | 10758 | 575 |
| chr17\_3164277\_3145075\_+19202-Scaf8 | chr17 | Scaf8 | 0 | 0 | 0.180646022 | 19203 | 576 |
| chr17\_3198223\_3145075\_+53148-Scaf8 | chr17 | Scaf8 | 0 | 0.182309179 | 0 | 53149 | 3790 |
| chr17\_32225713\_32220161\_-5552-Brd4 | chr17 | Brd4 | 0 | 0.182309179 | 0 | 5553 | 1187 |
| chr17\_32253200\_32220161\_-33039-Brd4 | chr17 | Brd4 | 0 | 0.182309179 | 0 | 33040 | 1666 |
| chr17\_32272373\_32253041\_-19332-Brd4 | chr17 | Brd4 | 0 | 0.182309179 | 0 | 19333 | 19333 |
| chr17\_32338823\_32332479\_-6344-Akap8l | chr17 | Akap8l | 0 | 0 | 0.180646022 | 6345 | 1448 |
| chr17\_32777527\_32773505\_-4022-Zfp871 | chr17 | Zfp871 | 0 | 0 | 0.541938067 | 4023 | 2692 |
| chr17\_32777527\_32774441\_-3086-Zfp871 | chr17 | Zfp871 | 0.405592706 | 0.364618359 | 0.722584089 | 3087 | 1756 |
| chr17\_40955217\_40938836\_+16381-na | chr17 | na | 0 | 0.09115459 | 0 | 16382 | 16382 |
| chr17\_42816592\_42811040\_-5552-Cd2ap | chr17 | Cd2ap | 0 | 0 | 0.361292045 | 5553 | 386 |
| chr17\_42834285\_42820595\_-13690-Cd2ap | chr17 | Cd2ap | 0 | 0.364618359 | 0 | 13691 | 688 |
| chr17\_45048392\_45033238\_+15154-Supt3 | chr17 | Supt3 | 0 | 0.182309179 | 0 | 15155 | 579 |
| chr17\_46238987\_46238375\_+612-Xpo5 | chr17 | Xpo5 | 0 | 0.546927538 | 0 | 613 | 143 |
| chr17\_46543783\_46543180\_-603-Cul9 | chr17 | Cul9 | 0 | 0 | 0.361292045 | 604 | 604 |
| chr17\_46858698\_46824450\_-34248-Gltscr1l | chr17 | Gltscr1l | 0 | 0 | 0.180646022 | 34249 | 2101 |
| chr17\_46974045\_46964757\_-9288-Ubr2 | chr17 | Ubr2 | 0.202796353 | 0 | 0 | 9289 | 917 |
| chr17\_46983341\_46961499\_-21842-Ubr2 | chr17 | Ubr2 | 0.202796353 | 0 | 0 | 21843 | 1905 |
| chr17\_50086676\_50036941\_-49735-Rftn1 | chr17 | Rftn1 | 0 | 0.182309179 | 0 | 49736 | 820 |
| chr17\_50546483\_50541177\_+5306-na | chr17 | na | 0.202796353 | 0 | 0.180646022 | 5307 | 5307 |
| chr17\_50800195\_50782261\_-17934-Tbc1d5 | chr17 | Tbc1d5 | 0 | 0 | 0.180646022 | 17935 | 559 |
| chr17\_50920603\_50917527\_-3076-Tbc1d5 | chr17 | Tbc1d5 | 0.202796353 | 0.364618359 | 0.180646022 | 3077 | 383 |
| chr17\_51809287\_51803431\_-5856-Satb1 | chr17 | Satb1 | 0.405592706 | 0 | 0 | 5857 | 673 |
| chr17\_5279382\_5242828\_+36554-Arid1b | chr17 | Arid1b | 0.202796353 | 0 | 0 | 36555 | 514 |
| chr17\_5291283\_5279203\_+12080-Arid1b | chr17 | Arid1b | 0.202796353 | 0 | 0 | 12081 | 508 |
| chr17\_56356056\_56344334\_+11722-Kdm4b | chr17 | Kdm4b | 0 | 0.182309179 | 0 | 11723 | 759 |
| chr17\_5731574\_5712388\_+19186-na | chr17 | na | 0 | 0.09115459 | 0 | 19187 | 19187 |
| chr17\_5891899\_5886997\_+4902-Snx9 | chr17 | Snx9 | 1.622370823 | 0.729236718 | 0.903230112 | 4903 | 288 |
| chr17\_5899495\_5886997\_+12498-Snx9 | chr17 | Snx9 | 0.202796353 | 0.182309179 | 0 | 12499 | 457 |
| chr17\_5908699\_5899327\_+9372-Snx9 | chr17 | Snx9 | 0 | 0.182309179 | 0 | 9373 | 649 |
| chr17\_5920673\_5886997\_+33676-Snx9 | chr17 | Snx9 | 0.202796353 | 0 | 0 | 33677 | 1276 |
| chr17\_6067660\_6060203\_-7457-Serac1 | chr17 | Serac1 | 0.202796353 | 0 | 0.180646022 | 7458 | 660 |
| chr17\_6139156\_6106392\_+32764-Tulp4 | chr17 | Tulp4 | 1.013981764 | 0.546927538 | 0 | 32765 | 32765 |
| chr17\_6139156\_6118296\_+20860-Tulp4 | chr17 | Tulp4 | 0 | 0 | 0.180646022 | 20861 | 2017 |
| chr17\_6143082\_6137211\_+5871-Tulp4 | chr17 | Tulp4 | 0 | 0 | 0.180646022 | 5872 | 5872 |
| chr17\_6185298\_6137211\_+48087-Tulp4 | chr17 | Tulp4 | 1.825167175 | 2.005400973 | 0.722584089 | 48088 | 2237 |
| chr17\_6207057\_6176829\_+30228-Tulp4 | chr17 | Tulp4 | 0.405592706 | 0 | 0 | 30229 | 774 |
| chr17\_63269896\_63257128\_-12768-na | chr17 | na | 0.101398176 | 0 | 0 | 12769 | 12769 |
| chr17\_63487969\_63471408\_-16561-Fbxl17 | chr17 | Fbxl17 | 0 | 0.182309179 | 0 | 16562 | 390 |
| chr17\_63957317\_63896018\_+61299-Fer | chr17 | Fer | 0 | 0.182309179 | 0 | 61300 | 61300 |
| chr17\_64293024\_64287001\_-6023-Pja2 | chr17 | Pja2 | 0.202796353 | 0.364618359 | 0.361292045 | 6024 | 535 |
| chr17\_64297909\_64287001\_-10908-Pja2 | chr17 | Pja2 | 0 | 0 | 0.180646022 | 10909 | 721 |
| chr17\_64313118\_64287001\_-26117-Pja2 | chr17 | Pja2 | 0 | 0.182309179 | 0 | 26118 | 2085 |
| chr17\_64675247\_64636484\_+38763-Man2a1 | chr17 | Man2a1 | 0.202796353 | 0 | 0 | 38764 | 1225 |
| chr17\_64740883\_64731204\_+9679-Man2a1 | chr17 | Man2a1 | 0.202796353 | 0 | 0 | 9680 | 614 |
| chr17\_65816050\_65803160\_+12890-Ppp4r1 | chr17 | Ppp4r1 | 0 | 0 | 0.541938067 | 12891 | 994 |
| chr17\_65817027\_65803211\_+13816-Ppp4r1 | chr17 | Ppp4r1 | 0 | 0.182309179 | 0.180646022 | 13817 | 1920 |
| chr17\_65979600\_65970150\_-9450-Ankrd12 | chr17 | Ankrd12 | 0 | 0.182309179 | 0 | 9451 | 527 |
| chr17\_65987493\_65979502\_-7991-Ankrd12 | chr17 | Ankrd12 | 0.202796353 | 0 | 0 | 7992 | 4835 |
| chr17\_66817977\_66809466\_-8511-Ptprm | chr17 | Ptprm | 0.202796353 | 0 | 0.361292045 | 8512 | 478 |
| chr17\_67063157\_67063042\_-115-Ptprm | chr17 | Ptprm | 0 | 0 | 0.180646022 | 116 | 116 |
| chr17\_67095695\_67042095\_-53600-Ptprm | chr17 | Ptprm | 0.202796353 | 0 | 0.180646022 | 53601 | 936 |
| chr17\_67304272\_67042095\_-262177-Ptprm | chr17 | Ptprm | 0 | 0.182309179 | 0 | 262178 | 262178 |
| chr17\_67304272\_67300284\_-3988-na | chr17 | na | 0 | 0 | 0.180646022 | 3989 | 3989 |
| chr17\_67304272\_67300697\_-3575-na | chr17 | na | 0 | 0 | 0.180646022 | 3576 | 3576 |
| chr17\_67304272\_67303725\_-547-na | chr17 | na | 0 | 0.182309179 | 0 | 548 | 548 |
| chr17\_67562150\_67531860\_-30290-Gm36201 | chr17 | Gm36201 | 0 | 0 | 0.180646022 | 30291 | 30291 |
| chr17\_67643066\_67642236\_+830-na | chr17 | na | 0.101398176 | 0 | 0 | 831 | 831 |
| chr17\_67861355\_67855434\_-5921-Arhgap28 | chr17 | Arhgap28 | 0 | 0.182309179 | 0 | 5922 | 452 |
| chr17\_71052775\_71052614\_+161-Myom1 | chr17 | Myom1 | 0 | 0.182309179 | 0.180646022 | 162 | 162 |
| chr17\_71067369\_71052614\_+14755-Myom1 | chr17 | Myom1 | 0 | 0 | 0.180646022 | 14756 | 561 |
| chr17\_71092214\_71087444\_+4770-Myom1 | chr17 | Myom1 | 0 | 0 | 0.541938067 | 4771 | 427 |
| chr17\_71126688\_71122557\_+4131-Myom1 | chr17 | Myom1 | 0 | 0.182309179 | 0.361292045 | 4132 | 669 |
| chr17\_71632141\_71625353\_+6788-Wdr43 | chr17 | Wdr43 | 0 | 0 | 0.180646022 | 6789 | 518 |
| chr17\_71810982\_71789868\_+21114-Clip4 | chr17 | Clip4 | 0 | 0.182309179 | 0 | 21115 | 1036 |
| chr17\_71810982\_71798957\_+12025-Clip4 | chr17 | Clip4 | 0 | 0 | 0.180646022 | 12026 | 888 |
| chr17\_71810982\_71800799\_+10183-Clip4 | chr17 | Clip4 | 0.202796353 | 1.093855076 | 0 | 10184 | 748 |
| chr17\_7282869\_7249292\_+33577-Rps6ka2 | chr17 | Rps6ka2 | 0 | 0.182309179 | 0 | 33578 | 953 |
| chr17\_73907745\_73906010\_-1735-Xdh | chr17 | Xdh | 0.405592706 | 0.364618359 | 0 | 1736 | 434 |
| chr17\_73912540\_73909247\_-3293-Xdh | chr17 | Xdh | 0 | 0.182309179 | 0 | 3294 | 341 |
| chr17\_74245087\_74217027\_-28060-Memo1 | chr17 | Memo1 | 0 | 0.182309179 | 0 | 28061 | 776 |
| chr17\_74369285\_74367248\_+2037-Spast | chr17 | Spast | 0.202796353 | 0 | 0 | 2038 | 416 |
| chr17\_74371504\_74361070\_+10434-Spast | chr17 | Spast | 0.202796353 | 0 | 0 | 10435 | 571 |
| chr17\_74382040\_74372259\_+9781-Spast | chr17 | Spast | 0 | 0 | 0.180646022 | 9782 | 514 |
| chr17\_74573631\_74557901\_+15730-Birc6 | chr17 | Birc6 | 0.202796353 | 0 | 0 | 15731 | 832 |
| chr17\_74599967\_74557901\_+42066-Birc6 | chr17 | Birc6 | 0 | 0.182309179 | 0 | 42067 | 3739 |
| chr17\_74612345\_74557901\_+54444-Birc6 | chr17 | Birc6 | 0 | 0.364618359 | 0 | 54445 | 5557 |
| chr17\_74662818\_74618436\_+44382-Birc6 | chr17 | Birc6 | 0 | 0.182309179 | 0 | 44383 | 6221 |
| chr17\_74747764\_74724618\_+23146-Ttc27 | chr17 | Ttc27 | 0 | 0 | 0.180646022 | 23147 | 656 |
| chr17\_75227241\_75225156\_+2085-Ltbp1 | chr17 | Ltbp1 | 0.608389058 | 1.093855076 | 0.722584089 | 2086 | 500 |
| chr17\_75252415\_75225156\_+27259-Ltbp1 | chr17 | Ltbp1 | 0 | 0 | 0.180646022 | 27260 | 675 |
| chr17\_75290140\_75282328\_+7812-Ltbp1 | chr17 | Ltbp1 | 0 | 0.182309179 | 0 | 7813 | 325 |
| chr17\_75296343\_75273867\_+22476-Ltbp1 | chr17 | Ltbp1 | 0.202796353 | 0 | 0 | 22477 | 1113 |
| chr17\_75503389\_75488817\_+14572-Rasgrp3 | chr17 | Rasgrp3 | 0 | 0.182309179 | 0 | 14573 | 1349 |
| chr17\_78315746\_78302987\_+12759-Crim1 | chr17 | Crim1 | 0.405592706 | 0 | 0 | 12760 | 503 |
| chr17\_78335355\_78237742\_+97613-Crim1 | chr17 | Crim1 | 0 | 0 | 0.180646022 | 97614 | 1170 |
| chr17\_78818917\_78788205\_-30712-Heatr5b | chr17 | Heatr5b | 0 | 0.364618359 | 0 | 30713 | 2520 |
| chr17\_79659473\_79627462\_+32011-Rmdn2 | chr17 | Rmdn2 | 0.405592706 | 0 | 0 | 32012 | 1257 |
| chr17\_79659473\_79650302\_+9171-Rmdn2 | chr17 | Rmdn2 | 0.405592706 | 0 | 0.541938067 | 9172 | 339 |
| chr17\_79672573\_79650302\_+22271-Rmdn2 | chr17 | Rmdn2 | 0.811185411 | 0.364618359 | 0.541938067 | 22272 | 727 |
| chr17\_79876046\_79864703\_-11343-Atl2 | chr17 | Atl2 | 0.608389058 | 0 | 0 | 11344 | 485 |
| chr17\_80053641\_80030341\_-23300-Hnrnpll | chr17 | Hnrnpll | 0 | 0.182309179 | 0 | 23301 | 1667 |
| chr17\_80053641\_80044494\_-9147-Hnrnpll | chr17 | Hnrnpll | 0 | 0.546927538 | 0 | 9148 | 768 |
| chr17\_80150170\_80138013\_+12157-Galm | chr17 | Galm | 0 | 0 | 0.180646022 | 12158 | 444 |
| chr17\_80644845\_80636720\_-8125-Map4k3 | chr17 | Map4k3 | 0.202796353 | 0 | 0 | 8126 | 467 |
| chr17\_81445593\_81408067\_-37526-Slc8a1 | chr17 | Slc8a1 | 0 | 0.182309179 | 0 | 37527 | 737 |
| chr17\_81445593\_81428182\_-17411-Slc8a1 | chr17 | Slc8a1 | 0 | 0.546927538 | 0 | 17412 | 461 |
| chr17\_81649638\_81647809\_-1829-Slc8a1 | chr17 | Slc8a1 | 2.83914894 | 3.828492767 | 2.167752268 | 1830 | 1830 |
| chr17\_82956485\_82942428\_-14057-Gm34265 | chr17 | Gm34265 | 0 | 0.182309179 | 0 | 14058 | 447 |
| chr17\_84444509\_84443818\_-691-Thada | chr17 | Thada | 0 | 0.182309179 | 0.361292045 | 692 | 692 |
| chr17\_84464501\_84451709\_-12792-Thada | chr17 | Thada | 0 | 0.182309179 | 0 | 12793 | 790 |
| chr17\_84740668\_84731145\_-9523-Lrpprc | chr17 | Lrpprc | 0 | 0.182309179 | 0 | 9524 | 392 |
| chr17\_84756285\_84748961\_-7324-Lrpprc | chr17 | Lrpprc | 0 | 0.182309179 | 0.180646022 | 7325 | 859 |
| chr17\_84769702\_84753405\_-16297-Lrpprc | chr17 | Lrpprc | 0 | 0 | 0.180646022 | 16298 | 581 |
| chr17\_85083315\_85070428\_-12887-Prepl | chr17 | Prepl | 0 | 0 | 0.180646022 | 12888 | 1310 |
| chr17\_85083315\_85075866\_-7449-Prepl | chr17 | Prepl | 0 | 0 | 0.180646022 | 7450 | 936 |
| chr17\_85783451\_84766993\_-1016458-Lrpprc | chr17 | Lrpprc | 0 | 0.09115459 | 0 | 1016459 | 1016459 |
| chr17\_86001607\_85997506\_-4101-Srbd1 | chr17 | Srbd1 | 0 | 0 | 0.361292045 | 4102 | 372 |
| chr17\_86109334\_86095867\_-13467-na | chr17 | na | 0.202796353 | 0 | 0 | 13468 | 13468 |
| chr17\_86120746\_86051086\_-69660-Srbd1 | chr17 | Srbd1 | 0.202796353 | 0 | 0 | 69661 | 977 |
| chr17\_86120746\_86098512\_-22234-Srbd1 | chr17 | Srbd1 | 0.202796353 | 1.640782614 | 1.083876134 | 22235 | 802 |
| chr17\_86120746\_86109227\_-11519-Srbd1 | chr17 | Srbd1 | 0 | 0 | 0.180646022 | 11520 | 445 |
| chr17\_86496111\_86488160\_+7951-Prkce | chr17 | Prkce | 0.405592706 | 0.364618359 | 0 | 7952 | 614 |
| chr17\_86809789\_86809358\_+431-Epas1 | chr17 | Epas1 | 0 | 0.182309179 | 0 | 432 | 325 |
| chr17\_87992356\_87991929\_-427-Fbxo11 | chr17 | Fbxo11 | 0.101398176 | 0 | 0 | 428 | 346 |
| chr17\_88015712\_88008594\_-7118-Fbxo11 | chr17 | Fbxo11 | 0.202796353 | 0.182309179 | 0.180646022 | 7119 | 1163 |
| chr17\_88580551\_88542845\_+37706-Ppp1r21 | chr17 | Ppp1r21 | 0 | 0.182309179 | 0 | 37707 | 2028 |
| chr18\_10140888\_10129305\_-11583-Rock1 | chr18 | Rock1 | 0 | 0.364618359 | 0 | 11584 | 876 |
| chr18\_10586041\_10582055\_-3986-na | chr18 | na | 0 | 0.09115459 | 0 | 3987 | 3987 |
| chr18\_10752027\_10747356\_+4671-Mib1 | chr18 | Mib1 | 0 | 0 | 0.361292045 | 4672 | 377 |
| chr18\_12070131\_12064204\_-5927-na | chr18 | na | 0 | 0.09115459 | 0 | 5928 | 5928 |
| chr18\_12106003\_12074618\_-31385-Tmem241 | chr18 | Tmem241 | 0.202796353 | 0 | 0 | 31386 | 336 |
| chr18\_12191023\_12188209\_+2814-3110002H16Rik | chr18 | 3110002H16Rik | 0 | 0 | 0.180646022 | 2815 | 2815 |
| chr18\_13533397\_13526697\_-6700-Gm36802 | chr18 | Gm36802 | 0 | 0.182309179 | 0 | 6701 | 444 |
| chr18\_13542289\_13526697\_-15592-Gm36802 | chr18 | Gm36802 | 0 | 0 | 0.361292045 | 15593 | 15593 |
| chr18\_13546838\_13526697\_-20141-Gm36802 | chr18 | Gm36802 | 0.405592706 | 0 | 0 | 20142 | 20142 |
| chr18\_13689024\_13683062\_-5962-Zfp521 | chr18 | Zfp521 | 0.405592706 | 0 | 0 | 5963 | 5963 |
| chr18\_13717747\_13715141\_-2606-Zfp521 | chr18 | Zfp521 | 0 | 0 | 0.361292045 | 2607 | 248 |
| chr18\_13847134\_13817238\_-29896-Zfp521 | chr18 | Zfp521 | 0 | 0.182309179 | 0 | 29897 | 3438 |
| chr18\_13847134\_13843782\_-3352-Zfp521 | chr18 | Zfp521 | 0.202796353 | 0 | 0 | 3353 | 3353 |
| chr18\_13939141\_13938962\_-179-Zfp521 | chr18 | Zfp521 | 0.202796353 | 0 | 0 | 180 | 180 |
| chr18\_14813690\_14813091\_+599-Taf4b | chr18 | Taf4b | 0.202796353 | 0 | 0 | 600 | 600 |
| chr18\_14844470\_14796913\_+47557-Taf4b | chr18 | Taf4b | 0 | 0 | 0.180646022 | 47558 | 1958 |
| chr18\_21148904\_21147732\_-1172-Garem | chr18 | Garem | 0 | 0.182309179 | 0 | 1173 | 1173 |
| chr18\_23621474\_23583084\_+38390-Dtna | chr18 | Dtna | 0 | 0 | 0.361292045 | 38391 | 991 |
| chr18\_24612525\_24609630\_+2895-Elp2 | chr18 | Elp2 | 0 | 0.182309179 | 0 | 2896 | 306 |
| chr18\_25028169\_25020662\_+7507-Fhod3 | chr18 | Fhod3 | 0.811185411 | 0.182309179 | 0.180646022 | 7508 | 558 |
| chr18\_25066425\_25020662\_+45763-Fhod3 | chr18 | Fhod3 | 0 | 0.182309179 | 0 | 45764 | 953 |
| chr18\_25420075\_25384865\_+35210-AW554918 | chr18 | AW554918 | 0 | 0 | 0.090323011 | 35211 | 35211 |
| chr18\_30303074\_30294336\_+8738-Pik3c3 | chr18 | Pik3c3 | 0 | 0.182309179 | 0 | 8739 | 434 |
| chr18\_31607264\_31594577\_-12687-Slc25a46 | chr18 | Slc25a46 | 0 | 0.182309179 | 0 | 12688 | 457 |
| chr18\_31636099\_31619365\_+16734-Sap130 | chr18 | Sap130 | 0 | 0 | 0.361292045 | 16735 | 16735 |
| chr18\_31636099\_31633790\_+2309-Sap130 | chr18 | Sap130 | 0.202796353 | 0.364618359 | 0 | 2310 | 2310 |
| chr18\_31636099\_31635982\_+117-Sap130 | chr18 | Sap130 | 0 | 0.182309179 | 0 | 118 | 118 |
| chr18\_31772114\_31771670\_+444-Ammecr1l | chr18 | Ammecr1l | 0 | 0.364618359 | 0 | 445 | 445 |
| chr18\_31881282\_31878024\_+3258-Wdr33 | chr18 | Wdr33 | 0 | 0 | 0.180646022 | 3259 | 472 |
| chr18\_32424967\_32412421\_+12546-Bin1 | chr18 | Bin1 | 0 | 0.182309179 | 0 | 12547 | 885 |
| chr18\_32424967\_32419843\_+5124-Bin1 | chr18 | Bin1 | 0 | 0.182309179 | 0 | 5125 | 438 |
| chr18\_32432093\_32424820\_+7273-Bin1 | chr18 | Bin1 | 0.202796353 | 0 | 0 | 7274 | 700 |
| chr18\_32432425\_32424820\_+7605-Bin1 | chr18 | Bin1 | 2.027963528 | 1.640782614 | 1.445168179 | 7606 | 802 |
| chr18\_32863262\_32861027\_+2235-Wdr36 | chr18 | Wdr36 | 0 | 0 | 0.541938067 | 2236 | 446 |
| chr18\_32863262\_32861050\_+2212-Wdr36 | chr18 | Wdr36 | 0 | 0.182309179 | 0 | 2213 | 423 |
| chr18\_33861237\_33824459\_-36778-Epb41l4a | chr18 | Epb41l4a | 0 | 0.364618359 | 0 | 36779 | 707 |
| chr18\_33891476\_33874142\_-17334-Epb41l4a | chr18 | Epb41l4a | 0 | 0.182309179 | 0 | 17335 | 595 |
| chr18\_34221276\_32406100\_+1815176-Wdr36 | chr18 | Wdr36 | 0 | 0.364618359 | 0 | 1815177 | 1815177 |
| chr18\_34289942\_34268298\_+21644-Apc | chr18 | Apc | 0.202796353 | 0 | 0 | 21645 | 693 |
| chr18\_34300061\_34266058\_+34003-Apc | chr18 | Apc | 0 | 0 | 0.180646022 | 34004 | 1432 |
| chr18\_34301315\_34296031\_+5284-Apc | chr18 | Apc | 0.405592706 | 0 | 0 | 5285 | 628 |
| chr18\_34417049\_34412681\_+4368-Pkd2l2 | chr18 | Pkd2l2 | 0.405592706 | 0 | 0 | 4369 | 613 |
| chr18\_34494776\_34451208\_-43568-Fam13b | chr18 | Fam13b | 0 | 0 | 0.361292045 | 43569 | 1694 |
| chr18\_34498159\_34473550\_-24609-Fam13b | chr18 | Fam13b | 0 | 0.182309179 | 0 | 24610 | 1118 |
| chr18\_34813561\_34793004\_+20557-Kdm3b | chr18 | Kdm3b | 0.202796353 | 0 | 0 | 20558 | 3007 |
| chr18\_34813561\_34803450\_+10111-Kdm3b | chr18 | Kdm3b | 0.202796353 | 0 | 0 | 10112 | 2419 |
| chr18\_34824958\_34812372\_+12586-Kdm3b | chr18 | Kdm3b | 0 | 0.182309179 | 0 | 12587 | 1141 |
| chr18\_36581215\_36575019\_+6196-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.180646022 | 6197 | 456 |
| chr18\_36589581\_36581068\_+8513-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.361292045 | 8514 | 530 |
| chr18\_36591541\_36581068\_+10473-Ankhd1 | chr18 | Ankhd1 | 0.405592706 | 0 | 0.541938067 | 10474 | 625 |
| chr18\_36594322\_36581068\_+13254-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.180646022 | 13255 | 863 |
| chr18\_36634805\_36632067\_+2738-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.180646022 | 2739 | 761 |
| chr18\_36638708\_36632067\_+6641-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.180646022 | 6642 | 1100 |
| chr18\_36643094\_36632067\_+11027-Ankhd1 | chr18 | Ankhd1 | 0 | 0 | 0.180646022 | 11028 | 1482 |
| chr18\_36648740\_36632067\_+16673-Ankhd1 | chr18 | Ankhd1 | 0.405592706 | 0 | 0 | 16674 | 3831 |
| chr18\_36658138\_36632067\_+26071-Ankhd1 | chr18 | Ankhd1 | 0.202796353 | 0.182309179 | 0.180646022 | 26072 | 4574 |
| chr18\_36788670\_36787502\_+1168-Hars2 | chr18 | Hars2 | 0 | 0 | 0.361292045 | 1169 | 427 |
| chr18\_38143327\_38120117\_-23210-Gm30188 | chr18 | Gm30188 | 0 | 0.182309179 | 0 | 23211 | 556 |
| chr18\_38456121\_38451555\_+4566-Ndfip1 | chr18 | Ndfip1 | 0.405592706 | 0 | 0 | 4567 | 280 |
| chr18\_42246077\_42217468\_-28609-Lars | chr18 | Lars | 0 | 0 | 0.361292045 | 28610 | 2475 |
| chr18\_42324198\_42320764\_+3434-Rbm27 | chr18 | Rbm27 | 0.202796353 | 0 | 0 | 3435 | 595 |
| chr18\_42523066\_42519368\_+3698-Tcerg1 | chr18 | Tcerg1 | 0 | 0.182309179 | 0 | 3699 | 379 |
| chr18\_42538056\_42519368\_+18688-Tcerg1 | chr18 | Tcerg1 | 0 | 0 | 0.361292045 | 18689 | 1566 |
| chr18\_44354281\_44336889\_+17392-Myot | chr18 | Myot | 0 | 0.182309179 | 0 | 17393 | 1256 |
| chr18\_44354935\_44345012\_+9923-Myot | chr18 | Myot | 0 | 0.182309179 | 0 | 9924 | 641 |
| chr18\_44468521\_44459799\_-8722-Mcc | chr18 | Mcc | 0 | 0 | 0.180646022 | 8723 | 429 |
| chr18\_45592424\_45558290\_+34134-Kcnn2 | chr18 | Kcnn2 | 0 | 0.182309179 | 0 | 34135 | 1988 |
| chr18\_46434366\_46423309\_-11057-na | chr18 | na | 0 | 0 | 0.180646022 | 11058 | 11058 |
| chr18\_46434366\_46433132\_-1234-na | chr18 | na | 0.405592706 | 0.364618359 | 0 | 1235 | 1235 |
| chr18\_47300144\_47270609\_-29535-Sema6a | chr18 | Sema6a | 0 | 0.182309179 | 0 | 29536 | 1727 |
| chr18\_49729326\_49723622\_-5704-Dtwd2 | chr18 | Dtwd2 | 0 | 0.364618359 | 0 | 5705 | 536 |
| chr18\_5058774\_5040148\_+18626-Svil | chr18 | Svil | 0 | 0 | 0.180646022 | 18627 | 2128 |
| chr18\_5064690\_5063194\_+1496-Svil | chr18 | Svil | 0 | 0.182309179 | 0 | 1497 | 797 |
| chr18\_5074004\_5037108\_+36896-Svil | chr18 | Svil | 0.202796353 | 0 | 0 | 36897 | 3587 |
| chr18\_5074004\_5055980\_+18024-Svil | chr18 | Svil | 0 | 0 | 0.361292045 | 18025 | 2533 |
| chr18\_5088814\_5063194\_+25620-Svil | chr18 | Svil | 0 | 0.729236718 | 0 | 25621 | 1472 |
| chr18\_5108708\_5082783\_+25925-Svil | chr18 | Svil | 0 | 0 | 0.361292045 | 25926 | 2461 |
| chr18\_5117097\_5115978\_+1119-Svil | chr18 | Svil | 0 | 0 | 0.722584089 | 1120 | 269 |
| chr18\_5214919\_5210877\_-4042-Zfp438 | chr18 | Zfp438 | 6.286686938 | 5.469275382 | 3.612920447 | 4043 | 2123 |
| chr18\_53203119\_53189655\_+13464-Snx2 | chr18 | Snx2 | 0 | 0 | 0.180646022 | 13465 | 614 |
| chr18\_54988706\_54987611\_-1095-Zfp608 | chr18 | Zfp608 | 0.405592706 | 0 | 0 | 1096 | 1096 |
| chr18\_5641518\_5620401\_+21117-Zeb1 | chr18 | Zeb1 | 0.405592706 | 0 | 0 | 21118 | 21118 |
| chr18\_5641518\_5627139\_+14379-Zeb1 | chr18 | Zeb1 | 1.216778117 | 1.276164256 | 0.722584089 | 14380 | 14380 |
| chr18\_5641518\_5633204\_+8314-Zeb1 | chr18 | Zeb1 | 0 | 0.729236718 | 0 | 8315 | 8315 |
| chr18\_56491999\_56488751\_+3248-Gramd3 | chr18 | Gramd3 | 0 | 0 | 0.180646022 | 3249 | 428 |
| chr18\_5705243\_5627139\_+78104-na | chr18 | na | 0 | 0 | 0.180646022 | 78105 | 78105 |
| chr18\_5705243\_5633204\_+72039-Zeb1 | chr18 | Zeb1 | 0.202796353 | 0.729236718 | 0 | 72040 | 355 |
| chr18\_5773094\_5766221\_+6873-Zeb1 | chr18 | Zeb1 | 0 | 0.911545897 | 0 | 6874 | 2652 |
| chr18\_57906104\_57898059\_+8045-Slc12a2 | chr18 | Slc12a2 | 0 | 0 | 0.180646022 | 8046 | 821 |
| chr18\_58673366\_58671208\_+2158-Isoc1 | chr18 | Isoc1 | 0 | 0 | 0.180646022 | 2159 | 441 |
| chr18\_60556370\_60546221\_+10149-Dctn4 | chr18 | Dctn4 | 0 | 0 | 0.180646022 | 10150 | 701 |
| chr18\_6070091\_6033141\_-36950-Arhgap12 | chr18 | Arhgap12 | 0.202796353 | 0 | 0 | 36951 | 1264 |
| chr18\_6070091\_6057517\_-12574-Arhgap12 | chr18 | Arhgap12 | 0 | 0.182309179 | 0 | 12575 | 684 |
| chr18\_6070091\_6061847\_-8244-Arhgap12 | chr18 | Arhgap12 | 0.405592706 | 0.182309179 | 0 | 8245 | 609 |
| chr18\_60713632\_60712723\_-909-Ndst1 | chr18 | Ndst1 | 0.202796353 | 0.182309179 | 0 | 910 | 910 |
| chr18\_6073286\_6061847\_-11439-Arhgap12 | chr18 | Arhgap12 | 0.405592706 | 0 | 0 | 11440 | 11440 |
| chr18\_6073286\_6061847\_-11439-na | chr18 | na | 0 | 0 | 0.180646022 | 11440 | 11440 |
| chr18\_6073286\_6064341\_-8945-na | chr18 | na | 0 | 0.09115459 | 0 | 8946 | 8946 |
| chr18\_61159212\_61140791\_-18421-Hmgxb3 | chr18 | Hmgxb3 | 0 | 0.364618359 | 0 | 18422 | 1645 |
| chr18\_61309682\_61302619\_-7063-Ppargc1b | chr18 | Ppargc1b | 0 | 0 | 0.180646022 | 7064 | 1105 |
| chr18\_61524003\_61517995\_-6008-Arhgef37 | chr18 | Arhgef37 | 0.405592706 | 0 | 0 | 6009 | 469 |
| chr18\_61577252\_61575410\_+1842-Csnk1a1 | chr18 | Csnk1a1 | 0 | 0.546927538 | 0 | 1843 | 294 |
| chr18\_61580487\_61575410\_+5077-Csnk1a1 | chr18 | Csnk1a1 | 0.608389058 | 0 | 0 | 5078 | 550 |
| chr18\_61857185\_61839690\_-17495-Ablim3 | chr18 | Ablim3 | 0.405592706 | 0.182309179 | 0 | 17496 | 606 |
| chr18\_62083529\_62044835\_-38694-Gm35887 | chr18 | Gm35887 | 0.202796353 | 0 | 0 | 38695 | 996 |
| chr18\_62541046\_62516964\_-24082-Fbxo38 | chr18 | Fbxo38 | 0.202796353 | 0 | 0 | 24083 | 2102 |
| chr18\_63677001\_63671582\_-5419-Txnl1 | chr18 | Txnl1 | 0 | 0.182309179 | 0 | 5420 | 471 |
| chr18\_63760785\_63735579\_+25206-Wdr7 | chr18 | Wdr7 | 0 | 0 | 0.180646022 | 25207 | 1272 |
| chr18\_63796281\_63777528\_+18753-Wdr7 | chr18 | Wdr7 | 0.202796353 | 0 | 0 | 18754 | 1198 |
| chr18\_65198726\_65174045\_+24681-Nedd4l | chr18 | Nedd4l | 0.608389058 | 0.182309179 | 1.083876134 | 24682 | 975 |
| chr18\_65198726\_65178919\_+19807-Nedd4l | chr18 | Nedd4l | 0 | 0.911545897 | 0 | 19808 | 777 |
| chr18\_65198726\_65191437\_+7289-Nedd4l | chr18 | Nedd4l | 0 | 0 | 0.180646022 | 7290 | 585 |
| chr18\_65350708\_65349028\_-1680-Alpk2 | chr18 | Alpk2 | 0 | 0.729236718 | 0 | 1681 | 1681 |
| chr18\_65464115\_65444832\_+19283-Malt1 | chr18 | Malt1 | 0 | 0 | 0.361292045 | 19284 | 1105 |
| chr18\_65656632\_65582897\_+73735-Zfp532 | chr18 | Zfp532 | 0 | 0 | 0.180646022 | 73736 | 6399 |
| chr18\_67434229\_67420986\_-13243-Afg3l2 | chr18 | Afg3l2 | 0.202796353 | 0 | 0 | 13244 | 1000 |
| chr18\_68106691\_68064217\_+42474-Ldlrad4 | chr18 | Ldlrad4 | 0.202796353 | 0 | 0 | 42475 | 611 |
| chr18\_69465447\_69461862\_+3585-na | chr18 | na | 0 | 0.09115459 | 0 | 3586 | 3586 |
| chr18\_70593340\_70580653\_+12687-Mbd2 | chr18 | Mbd2 | 0 | 0 | 0.722584089 | 12688 | 298 |
| chr18\_73658898\_73648885\_-10013-Smad4 | chr18 | Smad4 | 0 | 0.182309179 | 0 | 10014 | 641 |
| chr18\_73662867\_73648885\_-13982-Smad4 | chr18 | Smad4 | 0.202796353 | 0.182309179 | 0.180646022 | 13983 | 851 |
| chr18\_73662867\_73657195\_-5672-Smad4 | chr18 | Smad4 | 0.405592706 | 0 | 0.722584089 | 5673 | 498 |
| chr18\_74274773\_74273735\_+1038-Mbd1 | chr18 | Mbd1 | 0.202796353 | 0 | 0 | 1039 | 400 |
| chr18\_7444105\_7403186\_-40919-Mpp7 | chr18 | Mpp7 | 0 | 0.182309179 | 0 | 40920 | 883 |
| chr18\_74799174\_74798312\_+862-Acaa2 | chr18 | Acaa2 | 0 | 0.182309179 | 0.180646022 | 863 | 306 |
| chr18\_75063173\_75043079\_+20094-Dym | chr18 | Dym | 0 | 0.364618359 | 0 | 20095 | 545 |
| chr18\_75063173\_75055281\_+7892-Dym | chr18 | Dym | 0 | 0.364618359 | 0 | 7893 | 301 |
| chr18\_75082507\_75052981\_+29526-Dym | chr18 | Dym | 0.202796353 | 0.182309179 | 0 | 29527 | 623 |
| chr18\_75126919\_75080203\_+46716-Dym | chr18 | Dym | 0.405592706 | 0 | 0 | 46717 | 966 |
| chr18\_75126919\_75119111\_+7808-Dym | chr18 | Dym | 0.202796353 | 0 | 0 | 7809 | 514 |
| chr18\_75199265\_75114790\_+84475-Dym | chr18 | Dym | 0 | 0.182309179 | 0.180646022 | 84476 | 800 |
| chr18\_75521869\_75519739\_-2130-Ctif | chr18 | Ctif | 0.202796353 | 0.182309179 | 0 | 2131 | 862 |
| chr18\_77007883\_76977219\_-30664-Katnal2 | chr18 | Katnal2 | 0 | 0.182309179 | 0 | 30665 | 1375 |
| chr18\_77009139\_76977219\_-31920-Katnal2 | chr18 | Katnal2 | 0 | 0 | 0.361292045 | 31921 | 31921 |
| chr18\_77105889\_77097249\_+8640-Pias2 | chr18 | Pias2 | 0 | 0.546927538 | 0.541938067 | 8641 | 560 |
| chr18\_77674684\_77673900\_-784-8030462N17Rik | chr18 | 8030462N17Rik | 0 | 1.093855076 | 0 | 785 | 785 |
| chr18\_77875919\_77871568\_+4351-Pstpip2 | chr18 | Pstpip2 | 0 | 0.182309179 | 0 | 4352 | 404 |
| chr18\_77962538\_77959030\_+3508-Epg5 | chr18 | Epg5 | 0 | 0.546927538 | 0 | 3509 | 580 |
| chr18\_77981495\_77975837\_+5658-Epg5 | chr18 | Epg5 | 0 | 0 | 0.180646022 | 5659 | 741 |
| chr18\_78924042\_78916692\_-7350-Setbp1 | chr18 | Setbp1 | 0.202796353 | 0 | 0 | 7351 | 7351 |
| chr18\_80667160\_80649832\_-17328-Nfatc1 | chr18 | Nfatc1 | 0.202796353 | 0 | 0 | 17329 | 706 |
| chr18\_80667160\_80663295\_-3865-Nfatc1 | chr18 | Nfatc1 | 0.608389058 | 0.364618359 | 0 | 3866 | 517 |
| chr18\_80682318\_80635691\_-46627-Nfatc1 | chr18 | Nfatc1 | 0 | 0.182309179 | 0 | 46628 | 1252 |
| chr18\_80698656\_80635691\_-62965-Nfatc1 | chr18 | Nfatc1 | 0.811185411 | 0 | 0 | 62966 | 2354 |
| chr18\_80698656\_80682159\_-16497-Nfatc1 | chr18 | Nfatc1 | 0.405592706 | 0 | 0.180646022 | 16498 | 1262 |
| chr18\_80698656\_80697555\_-1101-Nfatc1 | chr18 | Nfatc1 | 0.405592706 | 0 | 0.361292045 | 1102 | 1102 |
| chr18\_80909705\_80836355\_-73350-Atp9b | chr18 | Atp9b | 0 | 0 | 0.180646022 | 73351 | 726 |
| chr18\_80917878\_80858544\_-59334-Atp9b | chr18 | Atp9b | 1.216778117 | 0 | 1.806460223 | 59335 | 817 |
| chr18\_80917878\_80869742\_-48136-Atp9b | chr18 | Atp9b | 0 | 0.546927538 | 0 | 48137 | 722 |
| chr18\_80917878\_80877315\_-40563-Atp9b | chr18 | Atp9b | 0 | 0 | 1.083876134 | 40564 | 607 |
| chr18\_80917878\_80909592\_-8286-Atp9b | chr18 | Atp9b | 0.811185411 | 0.729236718 | 0 | 8287 | 439 |
| chr18\_82646241\_82620318\_-25923-Zfp236 | chr18 | Zfp236 | 0.202796353 | 0.182309179 | 0 | 25924 | 2759 |
| chr18\_82682287\_82656949\_-25338-Zfp236 | chr18 | Zfp236 | 0 | 0.364618359 | 0 | 25339 | 1362 |
| chr18\_82682287\_82664838\_-17449-Zfp236 | chr18 | Zfp236 | 0 | 1.276164256 | 1.083876134 | 17450 | 929 |
| chr18\_82682287\_82668572\_-13715-Zfp236 | chr18 | Zfp236 | 0.405592706 | 0 | 0.541938067 | 13716 | 785 |
| chr18\_82682287\_82671686\_-10601-Zfp236 | chr18 | Zfp236 | 0 | 0 | 0.361292045 | 10602 | 612 |
| chr18\_82682287\_82674307\_-7980-Zfp236 | chr18 | Zfp236 | 0 | 0.182309179 | 0 | 7981 | 487 |
| chr18\_82685339\_82668572\_-16767-Zfp236 | chr18 | Zfp236 | 0 | 0.182309179 | 0 | 16768 | 941 |
| chr18\_82687138\_82664838\_-22300-Zfp236 | chr18 | Zfp236 | 0.202796353 | 0 | 0 | 22301 | 22301 |
| chr18\_82910992\_82500727\_+410265-Mbp | chr18 | Mbp | 0 | 0.182309179 | 0 | 410266 | 410266 |
| chr18\_82957449\_82955524\_+1925-Zfp516 | chr18 | Zfp516 | 2.027963528 | 1.640782614 | 0.722584089 | 1926 | 1926 |
| chr18\_82988198\_82986744\_+1454-Zfp516 | chr18 | Zfp516 | 0.405592706 | 0.182309179 | 0.361292045 | 1455 | 1455 |
| chr18\_82994537\_82986744\_+7793-Zfp516 | chr18 | Zfp516 | 0.405592706 | 0 | 0.180646022 | 7794 | 1643 |
| chr18\_84354691\_84342946\_-11745-Zfp407 | chr18 | Zfp407 | 0 | 0.182309179 | 0 | 11746 | 372 |
| chr18\_84563046\_84432360\_-130686-Zfp407 | chr18 | Zfp407 | 0 | 0.182309179 | 0 | 130687 | 4910 |
| chr18\_84563046\_84552870\_-10176-Zfp407 | chr18 | Zfp407 | 0 | 0 | 0.180646022 | 10177 | 4835 |
| chr19\_10623638\_10621541\_+2097-Ddb1 | chr19 | Ddb1 | 0.202796353 | 0 | 0 | 2098 | 867 |
| chr19\_11925226\_11923801\_+1425-Patl1 | chr19 | Patl1 | 0 | 0.182309179 | 0 | 1426 | 308 |
| chr19\_11931656\_11929875\_+1781-Patl1 | chr19 | Patl1 | 0 | 0 | 0.180646022 | 1782 | 305 |
| chr19\_11937379\_11932138\_+5241-Patl1 | chr19 | Patl1 | 0.405592706 | 0 | 0 | 5242 | 467 |
| chr19\_11990782\_11978237\_+12545-Osbp | chr19 | Osbp | 0.405592706 | 0 | 0 | 12546 | 1039 |
| chr19\_14468271\_14464309\_-3962-Tle4 | chr19 | Tle4 | 0.202796353 | 0 | 0 | 3963 | 731 |
| chr19\_16746078\_16744824\_-1254-Vps13a | chr19 | Vps13a | 0 | 0 | 0.090323011 | 1255 | 369 |
| chr19\_19251363\_19244067\_+7296-na | chr19 | na | 0.101398176 | 0.182309179 | 0.180646022 | 7297 | 7297 |
| chr19\_19258635\_19244067\_+14568-na | chr19 | na | 0 | 0.09115459 | 0 | 14569 | 14569 |
| chr19\_19284625\_19231756\_+52869-Gm41815 | chr19 | Gm41815 | 0.202796353 | 0 | 0 | 52870 | 52870 |
| chr19\_19439426\_19420206\_+19220-na | chr19 | na | 0.202796353 | 0 | 0 | 19221 | 19221 |
| chr19\_21684305\_21678353\_+5952-Abhd17b | chr19 | Abhd17b | 0.202796353 | 0 | 0 | 5953 | 858 |
| chr19\_24120903\_24112746\_-8157-Tjp2 | chr19 | Tjp2 | 0 | 0.182309179 | 0 | 8158 | 538 |
| chr19\_24733677\_24727669\_-6008-Pgm5 | chr19 | Pgm5 | 0 | 0.364618359 | 0 | 6009 | 320 |
| chr19\_25411764\_25409086\_+2678-Kank1 | chr19 | Kank1 | 0.202796353 | 0.364618359 | 0.180646022 | 2679 | 2679 |
| chr19\_26654511\_26647021\_+7490-Smarca2 | chr19 | Smarca2 | 0.405592706 | 0 | 0 | 7491 | 646 |
| chr19\_26683922\_26676634\_+7288-Smarca2 | chr19 | Smarca2 | 0.202796353 | 0 | 0 | 7289 | 699 |
| chr19\_26706231\_26671084\_+35147-Smarca2 | chr19 | Smarca2 | 0.405592706 | 0 | 0 | 35148 | 1521 |
| chr19\_26752019\_26720851\_-31168-na | chr19 | na | 0 | 0 | 0.180646022 | 31169 | 31169 |
| chr19\_27248026\_27217543\_+30483-Vldlr | chr19 | Vldlr | 0 | 0.182309179 | 0.361292045 | 30484 | 2658 |
| chr19\_27813690\_27793611\_-20079-Rfx3 | chr19 | Rfx3 | 0.202796353 | 0 | 0 | 20080 | 841 |
| chr19\_28540408\_28530873\_-9535-Glis3 | chr19 | Glis3 | 0 | 0.182309179 | 0.180646022 | 9536 | 1322 |
| chr19\_29134503\_29115723\_+18780-Rcl1 | chr19 | Rcl1 | 0.202796353 | 0.182309179 | 0 | 18781 | 835 |
| chr19\_29602780\_29577583\_+25197-Ric1 | chr19 | Ric1 | 0.202796353 | 0 | 0 | 25198 | 2885 |
| chr19\_29776310\_29753600\_-22710-na | chr19 | na | 0 | 0 | 0.090323011 | 22711 | 22711 |
| chr19\_29786449\_29753600\_-32849-9930021J03Rik | chr19 | 9930021J03Rik | 0 | 0.182309179 | 0.180646022 | 32850 | 1619 |
| chr19\_29850668\_29838861\_-11807-Gm41832 | chr19 | Gm41832 | 0 | 0.364618359 | 0 | 11808 | 11808 |
| chr19\_32068615\_32043481\_-25134-Asah2 | chr19 | Asah2 | 0 | 0 | 0.180646022 | 25135 | 1173 |
| chr19\_32160363\_32159524\_-839-Sgms1 | chr19 | Sgms1 | 0 | 0.182309179 | 0 | 840 | 840 |
| chr19\_32269981\_32223509\_-46472-Sgms1 | chr19 | Sgms1 | 0.202796353 | 0 | 0 | 46473 | 46473 |
| chr19\_32269981\_32247994\_-21987-Sgms1 | chr19 | Sgms1 | 0 | 0.364618359 | 0 | 21988 | 21988 |
| chr19\_32289631\_32247994\_-41637-na | chr19 | na | 0.101398176 | 0 | 0 | 41638 | 41638 |
| chr19\_34841109\_34821100\_-20009-Pank1 | chr19 | Pank1 | 0 | 0 | 0.180646022 | 20010 | 908 |
| chr19\_3507355\_3469641\_-37714-Ppp6r3 | chr19 | Ppp6r3 | 0 | 0.182309179 | 0 | 37715 | 1307 |
| chr19\_3518382\_3478278\_-40104-Ppp6r3 | chr19 | Ppp6r3 | 0 | 0.364618359 | 0.361292045 | 40105 | 1218 |
| chr19\_3605494\_3604002\_-1492-Lrp5 | chr19 | Lrp5 | 0 | 0.182309179 | 0 | 1493 | 400 |
| chr19\_3615879\_3597244\_-18635-Lrp5 | chr19 | Lrp5 | 0 | 0.364618359 | 0 | 18636 | 1909 |
| chr19\_3652330\_3647528\_-4802-Lrp5 | chr19 | Lrp5 | 0 | 0 | 0.180646022 | 4803 | 527 |
| chr19\_36587430\_36569373\_+18057-Hectd2 | chr19 | Hectd2 | 0 | 0 | 0.361292045 | 18058 | 527 |
| chr19\_36615643\_36583936\_+31707-Hectd2 | chr19 | Hectd2 | 0.405592706 | 0 | 0 | 31708 | 1945 |
| chr19\_36676799\_36645684\_-31115-1500017E21Rik | chr19 | 1500017E21Rik | 0.101398176 | 0 | 0 | 31116 | 31116 |
| chr19\_36676799\_36645684\_-31115-na | chr19 | na | 0 | 0.09115459 | 0 | 31116 | 31116 |
| chr19\_36676799\_36675832\_-967-na | chr19 | na | 0 | 0.182309179 | 0.180646022 | 968 | 968 |
| chr19\_36888895\_36879235\_+9660-Tnks2 | chr19 | Tnks2 | 0.202796353 | 0.182309179 | 0.361292045 | 9661 | 923 |
| chr19\_36926401\_36411956\_+514445-Tnks2 | chr19 | Tnks2 | 0 | 0 | 0.180646022 | 514446 | 514446 |
| chr19\_36970038\_36956371\_+13667-Btaf1 | chr19 | Btaf1 | 0 | 0 | 0.361292045 | 13668 | 1129 |
| chr19\_36970038\_36958373\_+11665-Btaf1 | chr19 | Btaf1 | 0.608389058 | 0.729236718 | 0.722584089 | 11666 | 965 |
| chr19\_36973018\_36956371\_+16647-Btaf1 | chr19 | Btaf1 | 0 | 0 | 0.541938067 | 16648 | 1250 |
| chr19\_36983652\_36956371\_+27281-Btaf1 | chr19 | Btaf1 | 0 | 0 | 0.180646022 | 27282 | 2027 |
| chr19\_36983652\_36958373\_+25279-Btaf1 | chr19 | Btaf1 | 0 | 0.182309179 | 0 | 25280 | 1863 |
| chr19\_36994966\_36951034\_+43932-Btaf1 | chr19 | Btaf1 | 0 | 0.182309179 | 0 | 43933 | 3847 |
| chr19\_37004643\_36994270\_+10373-Btaf1 | chr19 | Btaf1 | 0 | 0.364618359 | 0 | 10374 | 1415 |
| chr19\_37054374\_37044522\_-9852-Cpeb3 | chr19 | Cpeb3 | 0.202796353 | 0 | 0 | 9853 | 297 |
| chr19\_37068291\_37044522\_-23769-Cpeb3 | chr19 | Cpeb3 | 1.216778117 | 0.546927538 | 0.361292045 | 23770 | 416 |
| chr19\_37139551\_37087538\_-52013-Cpeb3 | chr19 | Cpeb3 | 0 | 0.182309179 | 0 | 52014 | 52014 |
| chr19\_37174985\_37126332\_-48653-Cpeb3 | chr19 | Cpeb3 | 0 | 0.364618359 | 0 | 48654 | 1236 |
| chr19\_37330612\_37207295\_-123317-Ide | chr19 | Ide | 0 | 0 | 0.361292045 | 123318 | 123318 |
| chr19\_37330612\_37325148\_-5464-Ide | chr19 | Ide | 0.811185411 | 1.640782614 | 1.264522156 | 5465 | 563 |
| chr19\_37330612\_37328981\_-1631-Ide | chr19 | Ide | 0.405592706 | 0 | 0 | 1632 | 393 |
| chr19\_3805053\_3793068\_+11985-Suv420h1 | chr19 | Suv420h1 | 0.405592706 | 0 | 0 | 11986 | 817 |
| chr19\_3807421\_3793068\_+14353-Suv420h1 | chr19 | Suv420h1 | 0 | 0.182309179 | 0.541938067 | 14354 | 1014 |
| chr19\_38525452\_38523915\_+1537-Plce1 | chr19 | Plce1 | 0.405592706 | 0.364618359 | 0.180646022 | 1538 | 1538 |
| chr19\_38799390\_38798898\_-492-Noc3l | chr19 | Noc3l | 0 | 0.364618359 | 0 | 493 | 182 |
| chr19\_40324832\_40321793\_-3039-Sorbs1 | chr19 | Sorbs1 | 0 | 0.364618359 | 0 | 3040 | 254 |
| chr19\_40337035\_40311669\_-25366-Sorbs1 | chr19 | Sorbs1 | 0 | 0 | 0.361292045 | 25367 | 2427 |
| chr19\_40365166\_40336986\_-28180-na | chr19 | na | 0 | 0 | 0.090323011 | 28181 | 28181 |
| chr19\_40377016\_40340685\_-36331-na | chr19 | na | 0 | 0 | 0.090323011 | 36332 | 36332 |
| chr19\_40377016\_40340685\_-36331-Sorbs1 | chr19 | Sorbs1 | 0 | 0.182309179 | 0 | 36332 | 1362 |
| chr19\_41586716\_41581778\_+4938-na | chr19 | na | 0.405592706 | 0 | 0 | 4939 | 4939 |
| chr19\_42564341\_42562552\_+1789-R3hcc1l | chr19 | R3hcc1l | 1.41957447 | 1.093855076 | 0 | 1790 | 1790 |
| chr19\_42576201\_42562552\_+13649-R3hcc1l | chr19 | R3hcc1l | 0.608389058 | 2.005400973 | 1.083876134 | 13650 | 1966 |
| chr19\_42583543\_42562552\_+20991-R3hcc1l | chr19 | R3hcc1l | 0.608389058 | 0.182309179 | 0 | 20992 | 2274 |
| chr19\_4290871\_4288412\_-2459-Adrbk1 | chr19 | Adrbk1 | 0.405592706 | 0 | 0 | 2460 | 844 |
| chr19\_4325046\_4320152\_-4894-Kdm2a | chr19 | Kdm2a | 0 | 0 | 0.722584089 | 4895 | 1249 |
| chr19\_4362914\_4342847\_-20067-Kdm2a | chr19 | Kdm2a | 0 | 0 | 0.180646022 | 20068 | 1437 |
| chr19\_43705030\_43704199\_+831-Entpd7 | chr19 | Entpd7 | 0 | 0 | 0.180646022 | 832 | 357 |
| chr19\_43875020\_43852224\_-22796-Dnmbp | chr19 | Dnmbp | 0.202796353 | 0 | 0 | 22797 | 1749 |
| chr19\_43875020\_43866589\_-8431-Dnmbp | chr19 | Dnmbp | 1.41957447 | 1.276164256 | 0.180646022 | 8432 | 908 |
| chr19\_43903058\_43901070\_-1988-Dnmbp | chr19 | Dnmbp | 0.202796353 | 0 | 0 | 1989 | 1989 |
| chr19\_43910847\_43901070\_-9777-Dnmbp | chr19 | Dnmbp | 0.608389058 | 0.182309179 | 0.361292045 | 9778 | 2112 |
| chr19\_4394892\_4342847\_-52045-Kdm2a | chr19 | Kdm2a | 0.608389058 | 0 | 0.180646022 | 52046 | 1538 |
| chr19\_4394892\_4361538\_-33354-Kdm2a | chr19 | Kdm2a | 0 | 0.182309179 | 0 | 33355 | 366 |
| chr19\_44532693\_44528666\_-4027-Sec31b | chr19 | Sec31b | 0.202796353 | 0 | 0 | 4028 | 583 |
| chr19\_44943519\_44934112\_+9407-Fam178a | chr19 | Fam178a | 0 | 0 | 0.180646022 | 9408 | 2385 |
| chr19\_44949139\_44934112\_+15027-Fam178a | chr19 | Fam178a | 0 | 0 | 0.180646022 | 15028 | 2676 |
| chr19\_4530446\_4530249\_-197-na | chr19 | na | 0 | 0 | 0.180646022 | 198 | 198 |
| chr19\_45532062\_45527264\_+4798-Btrc | chr19 | Btrc | 0 | 0 | 0.180646022 | 4799 | 3283 |
| chr19\_45640521\_45626516\_-14005-Fbxw4 | chr19 | Fbxw4 | 0.405592706 | 0 | 0 | 14006 | 14006 |
| chr19\_45768007\_45757905\_-10102-Mgea5 | chr19 | Mgea5 | 0 | 0.364618359 | 0.722584089 | 10103 | 1259 |
| chr19\_45777017\_45770051\_-6966-Mgea5 | chr19 | Mgea5 | 0.202796353 | 0 | 0 | 6967 | 846 |
| chr19\_45846892\_45846108\_-784-9130011E15Rik | chr19 | 9130011E15Rik | 0.202796353 | 0 | 0 | 785 | 785 |
| chr19\_45946103\_45921617\_-24486-9130011E15Rik | chr19 | 9130011E15Rik | 0 | 0.182309179 | 0 | 24487 | 447 |
| chr19\_45978712\_45972823\_-5889-9130011E15Rik | chr19 | 9130011E15Rik | 0 | 0.182309179 | 0 | 5890 | 425 |
| chr19\_46280731\_46279210\_+1521-Gbf1 | chr19 | Gbf1 | 0.202796353 | 0 | 0 | 1522 | 828 |
| chr19\_47075128\_47070981\_+4147-Taf5 | chr19 | Taf5 | 0 | 0 | 0.180646022 | 4148 | 554 |
| chr19\_47343468\_47314035\_-29433-na | chr19 | na | 0.101398176 | 0 | 0 | 29434 | 29434 |
| chr19\_4785567\_4783838\_-1729-Rbm4 | chr19 | Rbm4 | 0 | 0.182309179 | 0 | 1730 | 1730 |
| chr19\_4785567\_4784724\_-843-na | chr19 | na | 1.622370823 | 0.364618359 | 0.541938067 | 844 | 844 |
| chr19\_4794009\_4776967\_-17042-na | chr19 | na | 0 | 0.09115459 | 0 | 17043 | 17043 |
| chr19\_4794009\_4790157\_-3852-Rbm4 | chr19 | Rbm4 | 0.405592706 | 0 | 0 | 3853 | 3853 |
| chr19\_4804015\_4787361\_-16654-Rbm4 | chr19 | Rbm4 | 0 | 0 | 0.541938067 | 16655 | 16655 |
| chr19\_4870993\_4869358\_-1635-Actn3 | chr19 | Actn3 | 0 | 0.364618359 | 0.361292045 | 1636 | 168 |
| chr19\_4871160\_4868763\_-2397-na | chr19 | na | 0 | 0.09115459 | 0 | 2398 | 2398 |
| chr19\_5288413\_5279269\_-9144-Sf3b2 | chr19 | Sf3b2 | 0 | 0.182309179 | 0 | 9145 | 1663 |
| chr19\_53818020\_53813248\_+4772-Rbm20 | chr19 | Rbm20 | 1.216778117 | 0.182309179 | 0.722584089 | 4773 | 1345 |
| chr19\_53834779\_53813248\_+21531-Rbm20 | chr19 | Rbm20 | 0.405592706 | 0.364618359 | 0 | 21532 | 1621 |
| chr19\_53853635\_53850102\_+3533-Rbm20 | chr19 | Rbm20 | 0.811185411 | 0.911545897 | 1.625814201 | 3534 | 859 |
| chr19\_5418251\_5417394\_+857-4930481A15Rik | chr19 | 4930481A15Rik | 0 | 0.273463769 | 0 | 858 | 858 |
| chr19\_5418251\_5417394\_+857-na | chr19 | na | 0.101398176 | 0 | 0 | 858 | 858 |
| chr19\_55391868\_55380942\_+10926-Vti1a | chr19 | Vti1a | 0.202796353 | 0.546927538 | 0 | 10927 | 184 |
| chr19\_56355586\_56350289\_-5297-Nrap | chr19 | Nrap | 0 | 0 | 0.180646022 | 5298 | 630 |
| chr19\_56378171\_56378055\_-116-Nrap | chr19 | Nrap | 0 | 0.182309179 | 0 | 117 | 117 |
| chr19\_56380313\_56380206\_-107-Nrap | chr19 | Nrap | 0 | 0.364618359 | 0 | 108 | 108 |
| chr19\_56792160\_56790919\_-1241-Ccdc186 | chr19 | Ccdc186 | 0 | 0 | 0.361292045 | 1242 | 348 |
| chr19\_57173459\_57152273\_-21186-Ablim1 | chr19 | Ablim1 | 0 | 0.182309179 | 0 | 21187 | 429 |
| chr19\_57173459\_57155152\_-18307-Ablim1 | chr19 | Ablim1 | 0.202796353 | 0 | 0 | 18308 | 319 |
| chr19\_57755618\_57751630\_+3988-Atrnl1 | chr19 | Atrnl1 | 0.202796353 | 1.093855076 | 0.722584089 | 3989 | 332 |
| chr19\_57777945\_57691767\_+86178-Atrnl1 | chr19 | Atrnl1 | 0 | 0.182309179 | 0 | 86179 | 1616 |
| chr19\_57777945\_57751630\_+26315-na | chr19 | na | 0 | 0 | 0.090323011 | 26316 | 26316 |
| chr19\_5798896\_4288412\_-1510484-Pcnx3 | chr19 | Pcnx3 | 0 | 0.182309179 | 0 | 1510485 | 1510485 |
| chr19\_5798896\_5798036\_-860-na | chr19 | na | 0.202796353 | 0.182309179 | 0 | 861 | 861 |
| chr19\_5839222\_5836706\_-2516-na | chr19 | na | 0.202796353 | 0 | 0 | 2517 | 2517 |
| chr19\_5840226\_5839972\_-254-na | chr19 | na | 0 | 0.364618359 | 0 | 255 | 255 |
| chr19\_59913448\_59871373\_-42075-Rab11fip2 | chr19 | Rab11fip2 | 0 | 0 | 0.361292045 | 42076 | 42076 |
| chr19\_59913448\_59896985\_-16463-Rab11fip2 | chr19 | Rab11fip2 | 0.202796353 | 0 | 0 | 16464 | 364 |
| chr19\_59937430\_59896985\_-40445-Rab11fip2 | chr19 | Rab11fip2 | 0 | 0 | 0.180646022 | 40446 | 1276 |
| chr19\_7458423\_7456300\_-2123-Rtn3 | chr19 | Rtn3 | 0.811185411 | 1.093855076 | 0.180646022 | 2124 | 2124 |
| chr19\_7474798\_7456300\_-18498-Rtn3 | chr19 | Rtn3 | 0.202796353 | 0 | 0 | 18499 | 18499 |
| chr19\_7518596\_7509348\_+9248-Atl3 | chr19 | Atl3 | 0 | 0 | 0.180646022 | 9249 | 515 |
| chr19\_7529361\_7520787\_+8574-Atl3 | chr19 | Atl3 | 0.608389058 | 0.911545897 | 0 | 8575 | 8575 |
| chr19\_8829950\_8825972\_+3978-Hnrnpul2 | chr19 | Hnrnpul2 | 0 | 0.182309179 | 0 | 3979 | 499 |
| chr19\_8931503\_8931047\_+456-Eml3 | chr19 | Eml3 | 0 | 0.364618359 | 0 | 457 | 372 |
| chr19\_9102719\_9076576\_+26143-Gm41805 | chr19 | Gm41805 | 0.405592706 | 0 | 0 | 26144 | 26144 |
| chr2\_10064311\_10058996\_-5315-Atp5c1 | chr2 | Atp5c1 | 0.202796353 | 0 | 0 | 5316 | 667 |
| chr2\_101901400\_101895135\_+6265-Commd9 | chr2 | Commd9 | 0 | 0 | 0.180646022 | 6266 | 878 |
| chr2\_103776157\_103775417\_-740-Caprin1 | chr2 | Caprin1 | 0 | 0.182309179 | 0 | 741 | 405 |
| chr2\_104435057\_104433168\_-1889-Hipk3 | chr2 | Hipk3 | 0.405592706 | 0.364618359 | 0.903230112 | 1890 | 844 |
| chr2\_104441364\_104433168\_-8196-Hipk3 | chr2 | Hipk3 | 0.202796353 | 0 | 0 | 8197 | 1517 |
| chr2\_104446635\_104430727\_-15908-Hipk3 | chr2 | Hipk3 | 0 | 0.182309179 | 0 | 15909 | 2005 |
| chr2\_104778253\_104776172\_-2081-Qser1 | chr2 | Qser1 | 0 | 0 | 0.722584089 | 2082 | 469 |
| chr2\_104780260\_104760494\_-19766-Qser1 | chr2 | Qser1 | 0 | 0 | 0.180646022 | 19767 | 1280 |
| chr2\_104780260\_104770043\_-10217-Qser1 | chr2 | Qser1 | 0.202796353 | 0 | 0 | 10218 | 933 |
| chr2\_104780260\_104776172\_-4088-Qser1 | chr2 | Qser1 | 0 | 0.182309179 | 0.180646022 | 4089 | 795 |
| chr2\_104790197\_104786520\_-3677-Qser1 | chr2 | Qser1 | 0 | 0 | 0.541938067 | 3678 | 3678 |
| chr2\_104795294\_104776172\_-19122-Qser1 | chr2 | Qser1 | 0.202796353 | 0 | 0 | 19123 | 4580 |
| chr2\_104795294\_104786520\_-8774-Qser1 | chr2 | Qser1 | 0.202796353 | 0 | 0 | 8775 | 3785 |
| chr2\_104830684\_104826176\_+4508-na | chr2 | na | 0 | 0.364618359 | 0 | 4509 | 4509 |
| chr2\_105981120\_105966708\_-14412-Dnajc24 | chr2 | Dnajc24 | 0.202796353 | 0 | 0 | 14413 | 595 |
| chr2\_109137532\_109131485\_-6047-Mettl15 | chr2 | Mettl15 | 0 | 0 | 0.180646022 | 6048 | 371 |
| chr2\_112355144\_112354174\_+970-Slc12a6 | chr2 | Slc12a6 | 0 | 0 | 0.180646022 | 971 | 366 |
| chr2\_11251996\_11250529\_-1467-na | chr2 | na | 0 | 0.182309179 | 0.180646022 | 1468 | 1468 |
| chr2\_112912403\_112900800\_-11603-Ryr3 | chr2 | Ryr3 | 0.202796353 | 0 | 0 | 11604 | 941 |
| chr2\_114058656\_114050289\_-8367-Actc1 | chr2 | Actc1 | 35.89495445 | 7.292367175 | 11.74199145 | 8368 | 8368 |
| chr2\_114151583\_114132967\_-18616-Aqr | chr2 | Aqr | 0.608389058 | 0 | 0 | 18617 | 1283 |
| chr2\_114151583\_114132967\_-18616-na | chr2 | na | 0 | 0.09115459 | 0 | 18617 | 18617 |
| chr2\_11490356\_11489671\_-685-Pfkfb3 | chr2 | Pfkfb3 | 0 | 0 | 0.361292045 | 686 | 142 |
| chr2\_11494028\_11474393\_-19635-Pfkfb3 | chr2 | Pfkfb3 | 0 | 0 | 0.180646022 | 19636 | 1753 |
| chr2\_11730646\_11723413\_+7233-Il15ra | chr2 | Il15ra | 0.304194529 | 0 | 0 | 7234 | 511 |
| chr2\_118420872\_118408352\_+12520-Eif2ak4 | chr2 | Eif2ak4 | 0 | 0.182309179 | 0 | 12521 | 654 |
| chr2\_118432280\_118412935\_+19345-Eif2ak4 | chr2 | Eif2ak4 | 0 | 0.546927538 | 0 | 19346 | 1719 |
| chr2\_118448512\_118442015\_+6497-Eif2ak4 | chr2 | Eif2ak4 | 0 | 0 | 0.180646022 | 6498 | 473 |
| chr2\_118877947\_118877661\_+286-Ivd | chr2 | Ivd | 0.405592706 | 0 | 0 | 287 | 178 |
| chr2\_118921696\_118915888\_+5808-Bahd1 | chr2 | Bahd1 | 0 | 0 | 0.180646022 | 5809 | 2533 |
| chr2\_119412627\_119402330\_-10297-Ino80 | chr2 | Ino80 | 0 | 0.364618359 | 0 | 10298 | 449 |
| chr2\_119445656\_119434149\_-11507-Ino80 | chr2 | Ino80 | 0.202796353 | 0 | 0 | 11508 | 711 |
| chr2\_119447059\_119402330\_-44729-Ino80 | chr2 | Ino80 | 0.202796353 | 0.182309179 | 0 | 44730 | 2573 |
| chr2\_119447059\_119425259\_-21800-Ino80 | chr2 | Ino80 | 0 | 0 | 0.361292045 | 21801 | 1811 |
| chr2\_119447059\_119433191\_-13868-Ino80 | chr2 | Ino80 | 0 | 0 | 0.361292045 | 13869 | 1058 |
| chr2\_119451450\_119402330\_-49120-Ino80 | chr2 | Ino80 | 0.811185411 | 0.364618359 | 0.541938067 | 49121 | 2963 |
| chr2\_119451450\_119412402\_-39048-Ino80 | chr2 | Ino80 | 0 | 0.182309179 | 0 | 39049 | 2740 |
| chr2\_119903733\_119902606\_+1127-Mga | chr2 | Mga | 0 | 0 | 1.445168179 | 1128 | 1128 |
| chr2\_119924086\_119916431\_+7655-Mga | chr2 | Mga | 0 | 0.729236718 | 0 | 7656 | 2014 |
| chr2\_120185349\_120185000\_-349-Pla2g4e | chr2 | Pla2g4e | 0.101398176 | 0 | 0.361292045 | 350 | 248 |
| chr2\_120209923\_120200213\_-9710-Pla2g4e | chr2 | Pla2g4e | 0 | 0.182309179 | 0 | 9711 | 290 |
| chr2\_120328715\_120328573\_-142-Vps39 | chr2 | Vps39 | 0 | 0.182309179 | 0 | 143 | 143 |
| chr2\_120394475\_120377893\_-16582-Tmem87a | chr2 | Tmem87a | 0.608389058 | 0 | 0 | 16583 | 828 |
| chr2\_120397447\_120377893\_-19554-Tmem87a | chr2 | Tmem87a | 0 | 0 | 0.180646022 | 19555 | 914 |
| chr2\_120397447\_120385774\_-11673-Tmem87a | chr2 | Tmem87a | 0 | 0.182309179 | 0 | 11674 | 568 |
| chr2\_120402770\_120371524\_-31246-Tmem87a | chr2 | Tmem87a | 0 | 0 | 0.180646022 | 31247 | 1250 |
| chr2\_120532222\_120522685\_-9537-Zfp106 | chr2 | Zfp106 | 0 | 0 | 0.180646022 | 9538 | 2209 |
| chr2\_120790355\_120760197\_-30158-Ttbk2 | chr2 | Ttbk2 | 0 | 0 | 0.361292045 | 30159 | 763 |
| chr2\_120825826\_120773229\_-52597-Ttbk2 | chr2 | Ttbk2 | 0.202796353 | 0 | 0 | 52598 | 52598 |
| chr2\_121343577\_121321655\_-21922-Ppip5k1 | chr2 | Ppip5k1 | 0 | 0.182309179 | 0 | 21923 | 3098 |
| chr2\_121347642\_121347264\_-378-Ppip5k1 | chr2 | Ppip5k1 | 0 | 0.182309179 | 0.180646022 | 379 | 284 |
| chr2\_121351013\_121331200\_-19813-Ppip5k1 | chr2 | Ppip5k1 | 0 | 0.182309179 | 0 | 19814 | 3379 |
| chr2\_122689552\_122682321\_-7231-Slc30a4 | chr2 | Slc30a4 | 0 | 0.182309179 | 0 | 7232 | 3613 |
| chr2\_12397566\_12382103\_-15463-Fam188a | chr2 | Fam188a | 0 | 0 | 0.361292045 | 15464 | 306 |
| chr2\_12405920\_12396179\_-9741-Fam188a | chr2 | Fam188a | 0 | 0 | 0.180646022 | 9742 | 579 |
| chr2\_125775731\_125771409\_-4322-Secisbp2l | chr2 | Secisbp2l | 0.202796353 | 0 | 0.361292045 | 4323 | 640 |
| chr2\_125836239\_125833724\_-2515-Cops2 | chr2 | Cops2 | 0 | 0.182309179 | 0 | 2516 | 240 |
| chr2\_125983363\_125975260\_+8103-Galk2 | chr2 | Galk2 | 0 | 0.182309179 | 0 | 8104 | 511 |
| chr2\_126799234\_126797111\_-2123-Trpm7 | chr2 | Trpm7 | 0 | 0 | 0.180646022 | 2124 | 639 |
| chr2\_126799234\_126797662\_-1572-Trpm7 | chr2 | Trpm7 | 0 | 0.182309179 | 0 | 1573 | 350 |
| chr2\_126830263\_126812696\_-17567-Trpm7 | chr2 | Trpm7 | 0 | 0.182309179 | 0 | 17568 | 2686 |
| chr2\_126830263\_126825412\_-4851-Trpm7 | chr2 | Trpm7 | 0 | 0 | 0.361292045 | 4852 | 945 |
| chr2\_126846245\_126844300\_-1945-Trpm7 | chr2 | Trpm7 | 0.202796353 | 0 | 0 | 1946 | 347 |
| chr2\_127222254\_127212349\_+9905-Snrnp200 | chr2 | Snrnp200 | 0 | 0 | 0.180646022 | 9906 | 1586 |
| chr2\_127284581\_127284095\_+486-Stard7 | chr2 | Stard7 | 0 | 0 | 0.180646022 | 487 | 487 |
| chr2\_127295568\_127284095\_+11473-Stard7 | chr2 | Stard7 | 0 | 0.729236718 | 0 | 11474 | 866 |
| chr2\_127297256\_127290772\_+6484-Stard7 | chr2 | Stard7 | 0.202796353 | 0 | 0 | 6485 | 529 |
| chr2\_128676247\_128675671\_-576-Anapc1 | chr2 | Anapc1 | 0 | 0 | 0.361292045 | 577 | 367 |
| chr2\_128680445\_128675671\_-4774-Anapc1 | chr2 | Anapc1 | 0 | 0 | 0.180646022 | 4775 | 677 |
| chr2\_128686060\_128680109\_-5951-Anapc1 | chr2 | Anapc1 | 0 | 0.182309179 | 0 | 5952 | 552 |
| chr2\_128784010\_128771347\_+12663-Mertk | chr2 | Mertk | 0.202796353 | 0 | 0 | 12664 | 783 |
| chr2\_128794578\_128771347\_+23231-Mertk | chr2 | Mertk | 0.202796353 | 0 | 0 | 23232 | 1190 |
| chr2\_130504335\_130503474\_+861-Ptpra | chr2 | Ptpra | 0 | 0 | 0.361292045 | 862 | 421 |
| chr2\_130713503\_130712260\_-1243-4930402H24Rik | chr2 | 4930402H24Rik | 0 | 0.182309179 | 0 | 1244 | 385 |
| chr2\_131274263\_131271559\_+2704-Pank2 | chr2 | Pank2 | 1.013981764 | 0.546927538 | 0 | 2705 | 446 |
| chr2\_131287597\_131271559\_+16038-Pank2 | chr2 | Pank2 | 0 | 0 | 0.180646022 | 16039 | 1001 |
| chr2\_131287597\_131273911\_+13686-Pank2 | chr2 | Pank2 | 0.202796353 | 0.364618359 | 0 | 13687 | 908 |
| chr2\_131525073\_131511984\_+13089-Smox | chr2 | Smox | 0 | 0 | 0.180646022 | 13090 | 1996 |
| chr2\_132101726\_132089096\_-12630-Slc23a2 | chr2 | Slc23a2 | 0 | 0 | 0.361292045 | 12631 | 629 |
| chr2\_132530090\_132529869\_-221-na | chr2 | na | 0.202796353 | 0 | 0 | 222 | 222 |
| chr2\_132558682\_132544392\_-14290-Gpcpd1 | chr2 | Gpcpd1 | 1.013981764 | 0 | 0.361292045 | 14291 | 834 |
| chr2\_132558682\_132546841\_-11841-Gpcpd1 | chr2 | Gpcpd1 | 0 | 0.364618359 | 0.361292045 | 11842 | 779 |
| chr2\_132568716\_132550314\_-18402-Gpcpd1 | chr2 | Gpcpd1 | 0 | 0 | 0.361292045 | 18403 | 665 |
| chr2\_140048309\_140030601\_-17708-Tasp1 | chr2 | Tasp1 | 0 | 0.364618359 | 0 | 17709 | 400 |
| chr2\_140625817\_140596066\_+29751-na | chr2 | na | 0 | 0 | 0.180646022 | 29752 | 29752 |
| chr2\_142690701\_142648428\_-42273-Kif16b | chr2 | Kif16b | 0 | 0.364618359 | 0 | 42274 | 297 |
| chr2\_14329924\_14276287\_+53637-Mrc1 | chr2 | Mrc1 | 0.405592706 | 0 | 0 | 53638 | 2599 |
| chr2\_144394378\_144380707\_+13671-Csrp2bp | chr2 | Csrp2bp | 0 | 0.182309179 | 0 | 13672 | 1284 |
| chr2\_146361519\_146314434\_-47085-Ralgapa2 | chr2 | Ralgapa2 | 0.202796353 | 0 | 0 | 47086 | 47086 |
| chr2\_146412868\_146380249\_-32619-Ralgapa2 | chr2 | Ralgapa2 | 0 | 0 | 0.090323011 | 32620 | 32620 |
| chr2\_146412868\_146387228\_-25640-Ralgapa2 | chr2 | Ralgapa2 | 0 | 0.364618359 | 0.541938067 | 25641 | 1064 |
| chr2\_146412868\_146404863\_-8005-Ralgapa2 | chr2 | Ralgapa2 | 0 | 0.364618359 | 0 | 8006 | 615 |
| chr2\_146895293\_146889021\_+6272-Kiz | chr2 | Kiz | 0.506990882 | 0.364618359 | 0 | 6273 | 6273 |
| chr2\_146942979\_146935803\_+7176-Kiz | chr2 | Kiz | 1.013981764 | 0 | 0 | 7177 | 311 |
| chr2\_147026439\_147024715\_+1724-Xrn2 | chr2 | Xrn2 | 0 | 0.364618359 | 0 | 1725 | 283 |
| chr2\_148690983\_148686514\_+4469-Gzf1 | chr2 | Gzf1 | 0.202796353 | 0.729236718 | 0 | 4470 | 698 |
| chr2\_148690983\_148688004\_+2979-Gzf1 | chr2 | Gzf1 | 0.202796353 | 0 | 0 | 2980 | 603 |
| chr2\_148690983\_148690076\_+907-Gzf1 | chr2 | Gzf1 | 0.202796353 | 0 | 0 | 908 | 435 |
| chr2\_148691678\_148686514\_+5164-Gzf1 | chr2 | Gzf1 | 0 | 0.364618359 | 0 | 5165 | 1393 |
| chr2\_148707023\_148703061\_-3962-Napb | chr2 | Napb | 0 | 0 | 1.625814201 | 3963 | 219 |
| chr2\_152917666\_152913445\_+4221-Mylk2 | chr2 | Mylk2 | 0 | 0.182309179 | 0 | 4222 | 748 |
| chr2\_152919453\_152913445\_+6008-Mylk2 | chr2 | Mylk2 | 5.881094232 | 5.469275382 | 6.322610782 | 6009 | 948 |
| chr2\_153204624\_153200643\_+3981-Tm9sf4 | chr2 | Tm9sf4 | 0 | 0 | 0.361292045 | 3982 | 450 |
| chr2\_154360767\_154345866\_-14901-Cdk5rap1 | chr2 | Cdk5rap1 | 0 | 0 | 0.361292045 | 14902 | 998 |
| chr2\_154863663\_154861977\_+1686-Raly | chr2 | Raly | 0 | 0 | 0.090323011 | 1687 | 144 |
| chr2\_155185604\_155179042\_+6562-Itch | chr2 | Itch | 0 | 0 | 0.180646022 | 6563 | 671 |
| chr2\_155192210\_155182158\_+10052-Itch | chr2 | Itch | 0.202796353 | 0.182309179 | 0 | 10053 | 622 |
| chr2\_155213102\_155209059\_+4043-Itch | chr2 | Itch | 0 | 0.182309179 | 0 | 4044 | 661 |
| chr2\_155331258\_155292690\_-38568-Pigu | chr2 | Pigu | 0 | 0 | 0.180646022 | 38569 | 876 |
| chr2\_155335423\_155314502\_-20921-Pigu | chr2 | Pigu | 0 | 0 | 0.361292045 | 20922 | 372 |
| chr2\_155402740\_155395720\_-7020-Ncoa6 | chr2 | Ncoa6 | 0.202796353 | 0 | 0 | 7021 | 258 |
| chr2\_155911836\_155887109\_-24727-Uqcc1 | chr2 | Uqcc1 | 0 | 0 | 0.180646022 | 24728 | 447 |
| chr2\_156103397\_156096418\_-6979-na | chr2 | na | 0 | 0.09115459 | 0 | 6980 | 6980 |
| chr2\_156103429\_156096826\_-6603-Rbm12 | chr2 | Rbm12 | 0.202796353 | 0 | 0 | 6604 | 1628 |
| chr2\_156267542\_156264281\_+3261-Phf20 | chr2 | Phf20 | 0 | 0.364618359 | 0 | 3262 | 468 |
| chr2\_156514210\_156508813\_+5397-Epb41l1 | chr2 | Epb41l1 | 0.405592706 | 0 | 0 | 5398 | 642 |
| chr2\_158050213\_158035996\_+14217-Rprd1b | chr2 | Rprd1b | 0 | 0.364618359 | 0.180646022 | 14218 | 504 |
| chr2\_158058827\_158047919\_+10908-Rprd1b | chr2 | Rprd1b | 0.202796353 | 0 | 0 | 10909 | 413 |
| chr2\_158482501\_158439529\_+42972-Ralgapb | chr2 | Ralgapb | 0 | 0 | 0.180646022 | 42973 | 2600 |
| chr2\_158493013\_158492364\_+649-Ralgapb | chr2 | Ralgapb | 0.101398176 | 0 | 0.090323011 | 650 | 188 |
| chr2\_158636800\_158631463\_+5337-Actr5 | chr2 | Actr5 | 0.202796353 | 0 | 0 | 5338 | 794 |
| chr2\_158832822\_158826305\_+6517-Dhx35 | chr2 | Dhx35 | 0.202796353 | 0.364618359 | 0 | 6518 | 1243 |
| chr2\_160705321\_160670100\_+35221-Top1 | chr2 | Top1 | 0 | 0.182309179 | 0.361292045 | 35222 | 1256 |
| chr2\_163376375\_163375604\_-771-Jph2 | chr2 | Jph2 | 1.825167175 | 0.182309179 | 0.180646022 | 772 | 772 |
| chr2\_163637004\_163629127\_-7877-Serinc3 | chr2 | Serinc3 | 0 | 0 | 0.180646022 | 7878 | 673 |
| chr2\_163639327\_163629127\_-10200-Serinc3 | chr2 | Serinc3 | 0 | 0 | 0.180646022 | 10201 | 835 |
| chr2\_164098576\_164083630\_+14946-Stk4 | chr2 | Stk4 | 0.202796353 | 0 | 0 | 14947 | 715 |
| chr2\_164778227\_164759229\_-18998-Tnnc2 | chr2 | Tnnc2 | 0 | 0.182309179 | 0 | 18999 | 18999 |
| chr2\_16548263\_16512022\_+36241-Plxdc2 | chr2 | Plxdc2 | 0.202796353 | 0 | 0 | 36242 | 359 |
| chr2\_16565405\_16512022\_+53383-Plxdc2 | chr2 | Plxdc2 | 0 | 0.364618359 | 0 | 53384 | 429 |
| chr2\_165767158\_165761904\_+5254-Eya2 | chr2 | Eya2 | 0 | 0.364618359 | 0 | 5255 | 457 |
| chr2\_166068548\_166054520\_+14028-Ncoa3 | chr2 | Ncoa3 | 0.202796353 | 0 | 0 | 14029 | 2542 |
| chr2\_16660873\_16512022\_+148851-Plxdc2 | chr2 | Plxdc2 | 0.202796353 | 0 | 0 | 148852 | 771 |
| chr2\_166836457\_166834471\_+1986-Arfgef2 | chr2 | Arfgef2 | 0.608389058 | 0.911545897 | 0.361292045 | 1987 | 583 |
| chr2\_166836457\_166835613\_+844-Arfgef2 | chr2 | Arfgef2 | 0 | 0 | 0.541938067 | 845 | 436 |
| chr2\_166869043\_166865680\_+3363-Arfgef2 | chr2 | Arfgef2 | 0 | 0.182309179 | 0 | 3364 | 611 |
| chr2\_166893618\_166885779\_+7839-Arfgef2 | chr2 | Arfgef2 | 0.405592706 | 0.182309179 | 0 | 7840 | 557 |
| chr2\_167309336\_167307544\_-1792-B4galt5 | chr2 | B4galt5 | 0 | 0 | 0.722584089 | 1793 | 239 |
| chr2\_167471602\_167467685\_+3917-Slc9a8 | chr2 | Slc9a8 | 0.202796353 | 0 | 0 | 3918 | 416 |
| chr2\_167511326\_167507047\_+4279-Rnf114 | chr2 | Rnf114 | 0.811185411 | 0.182309179 | 0.180646022 | 4280 | 373 |
| chr2\_168223154\_168212960\_-10194-Dpm1-adnp | chr2 | Dpm1-adnp | 0 | 0.182309179 | 0 | 10195 | 302 |
| chr2\_168507370\_168504445\_-2925-Nfatc2 | chr2 | Nfatc2 | 2.433556234 | 1.823091794 | 1.264522156 | 2926 | 873 |
| chr2\_168571113\_168567139\_-3974-Nfatc2 | chr2 | Nfatc2 | 0.608389058 | 0.182309179 | 0 | 3975 | 688 |
| chr2\_168710976\_168668006\_-42970-Atp9a | chr2 | Atp9a | 0 | 0.546927538 | 0 | 42971 | 1438 |
| chr2\_169886459\_169883526\_+2933-Tshz2 | chr2 | Tshz2 | 0 | 0 | 0.180646022 | 2934 | 2934 |
| chr2\_170120753\_170114061\_-6692-Zfp217 | chr2 | Zfp217 | 0 | 0.182309179 | 0 | 6693 | 3364 |
| chr2\_174426946\_174426489\_+457-Nelfcd | chr2 | Nelfcd | 0.405592706 | 0 | 0 | 458 | 271 |
| chr2\_179921967\_179921152\_-815-Taf4 | chr2 | Taf4 | 0.608389058 | 0 | 0 | 816 | 177 |
| chr2\_179923079\_179921152\_-1927-Taf4 | chr2 | Taf4 | 0 | 0.182309179 | 0 | 1928 | 303 |
| chr2\_179936011\_179921152\_-14859-Taf4 | chr2 | Taf4 | 0 | 0 | 0.180646022 | 14860 | 1446 |
| chr2\_179938530\_179935029\_-3501-Taf4 | chr2 | Taf4 | 0 | 0.182309179 | 0 | 3502 | 363 |
| chr2\_179939954\_179921152\_-18802-Taf4 | chr2 | Taf4 | 0.405592706 | 0 | 0 | 18803 | 1727 |
| chr2\_179939954\_179931886\_-8068-Taf4 | chr2 | Taf4 | 0.405592706 | 0 | 0 | 8069 | 8069 |
| chr2\_179939954\_179935029\_-4925-Taf4 | chr2 | Taf4 | 0.608389058 | 0.546927538 | 0 | 4926 | 524 |
| chr2\_180038849\_180037383\_-1466-Psma7 | chr2 | Psma7 | 4.258723409 | 1.276164256 | 0.903230112 | 1467 | 368 |
| chr2\_180685176\_180673231\_-11945-Dido1 | chr2 | Dido1 | 0 | 0 | 0.361292045 | 11946 | 1275 |
| chr2\_181155481\_181152784\_-2697-Eef1a2 | chr2 | Eef1a2 | 0 | 0 | 0.180646022 | 2698 | 696 |
| chr2\_18126229\_18109782\_+16447-Mllt10 | chr2 | Mllt10 | 0 | 0 | 0.180646022 | 16448 | 553 |
| chr2\_181352848\_181346832\_+6016-Rtel1 | chr2 | Rtel1 | 0.202796353 | 0 | 0 | 6017 | 1461 |
| chr2\_18146872\_18092168\_+54704-Mllt10 | chr2 | Mllt10 | 0 | 0 | 0.180646022 | 54705 | 1291 |
| chr2\_18146872\_18122245\_+24627-Mllt10 | chr2 | Mllt10 | 0 | 0.364618359 | 0 | 24628 | 459 |
| chr2\_18146872\_18132951\_+13921-Mllt10 | chr2 | Mllt10 | 0 | 0.182309179 | 0.361292045 | 13922 | 13922 |
| chr2\_181547553\_181546371\_+1182-Dnajc5 | chr2 | Dnajc5 | 0.405592706 | 0.182309179 | 0 | 1183 | 332 |
| chr2\_181622317\_181615977\_+6340-Prpf6 | chr2 | Prpf6 | 0.202796353 | 0 | 0 | 6341 | 531 |
| chr2\_18171075\_18132951\_+38124-Mllt10 | chr2 | Mllt10 | 0 | 0.182309179 | 0 | 38125 | 38125 |
| chr2\_18171075\_18146777\_+24298-Mllt10 | chr2 | Mllt10 | 0 | 0.182309179 | 0 | 24299 | 1000 |
| chr2\_18186396\_18159456\_+26940-Mllt10 | chr2 | Mllt10 | 0 | 0 | 0.361292045 | 26941 | 1083 |
| chr2\_18197997\_18159456\_+38541-Mllt10 | chr2 | Mllt10 | 0 | 0.182309179 | 0 | 38542 | 1274 |
| chr2\_18197997\_18162749\_+35248-Mllt10 | chr2 | Mllt10 | 0 | 0 | 0.180646022 | 35249 | 586 |
| chr2\_18203755\_18132951\_+70804-Mllt10 | chr2 | Mllt10 | 0.202796353 | 0.182309179 | 0.361292045 | 70805 | 70805 |
| chr2\_18203755\_18186218\_+17537-Mllt10 | chr2 | Mllt10 | 0 | 0 | 0.180646022 | 17538 | 525 |
| chr2\_18222761\_18216375\_-6386-Dnajc1 | chr2 | Dnajc1 | 0 | 0.182309179 | 0 | 6387 | 1449 |
| chr2\_20766611\_20760215\_+6396-Etl4 | chr2 | Etl4 | 0 | 0 | 0.180646022 | 6397 | 217 |
| chr2\_20859972\_20855354\_-4618-Arhgap21 | chr2 | Arhgap21 | 0 | 0 | 0.180646022 | 4619 | 503 |
| chr2\_20860036\_20854935\_-5101-Arhgap21 | chr2 | Arhgap21 | 1.41957447 | 5.104657023 | 2.167752268 | 5102 | 673 |
| chr2\_20860036\_20855354\_-4682-Arhgap21 | chr2 | Arhgap21 | 3.447537998 | 5.286966202 | 4.335504536 | 4683 | 567 |
| chr2\_20881851\_20879961\_-1890-Arhgap21 | chr2 | Arhgap21 | 0 | 0 | 0.361292045 | 1891 | 1891 |
| chr2\_20889953\_20879961\_-9992-Arhgap21 | chr2 | Arhgap21 | 0.405592706 | 0.182309179 | 0 | 9993 | 2055 |
| chr2\_20892177\_20871392\_-20785-Arhgap21 | chr2 | Arhgap21 | 0 | 0 | 0.180646022 | 20786 | 2410 |
| chr2\_20892177\_20887106\_-5071-Arhgap21 | chr2 | Arhgap21 | 0.202796353 | 0.364618359 | 0 | 5072 | 227 |
| chr2\_22971259\_22957018\_-14241-Abi1 | chr2 | Abi1 | 0.202796353 | 0 | 0 | 14242 | 535 |
| chr2\_23545579\_23506909\_-38670-Spopl | chr2 | Spopl | 0 | 0 | 0.180646022 | 38671 | 5741 |
| chr2\_24815832\_24801507\_-14325-Ehmt1 | chr2 | Ehmt1 | 0.202796353 | 0 | 0 | 14326 | 1035 |
| chr2\_24825067\_24801507\_-23560-Ehmt1 | chr2 | Ehmt1 | 0.608389058 | 0 | 0.180646022 | 23561 | 1174 |
| chr2\_24858250\_24836396\_-21854-Ehmt1 | chr2 | Ehmt1 | 0 | 0.182309179 | 0 | 21855 | 1212 |
| chr2\_24884702\_24838701\_-46001-Ehmt1 | chr2 | Ehmt1 | 0 | 0 | 0.180646022 | 46002 | 2098 |
| chr2\_24884702\_24852665\_-32037-Ehmt1 | chr2 | Ehmt1 | 0.202796353 | 0 | 0.361292045 | 32038 | 1413 |
| chr2\_24887069\_24824945\_-62124-Ehmt1 | chr2 | Ehmt1 | 0 | 0.182309179 | 0 | 62125 | 2484 |
| chr2\_25049743\_24997227\_+52516-Pnpla7 | chr2 | Pnpla7 | 0 | 0.182309179 | 0 | 52517 | 52517 |
| chr2\_25050971\_25049999\_+972-Pnpla7 | chr2 | Pnpla7 | 0 | 0.364618359 | 0 | 973 | 304 |
| chr2\_25206345\_25200659\_-5686-Nelfb | chr2 | Nelfb | 0 | 0.182309179 | 0 | 5687 | 999 |
| chr2\_25206345\_25203141\_-3204-Nelfb | chr2 | Nelfb | 0 | 0.546927538 | 0.361292045 | 3205 | 748 |
| chr2\_25278505\_25273800\_+4705-Anapc2 | chr2 | Anapc2 | 0.202796353 | 0 | 0 | 4706 | 728 |
| chr2\_25345594\_25341607\_+3987-Man1b1 | chr2 | Man1b1 | 0.202796353 | 0 | 0 | 3988 | 634 |
| chr2\_25588712\_25586868\_-1844-Rabl6 | chr2 | Rabl6 | 0 | 0.182309179 | 0 | 1845 | 608 |
| chr2\_25602555\_25596433\_-6122-Rabl6 | chr2 | Rabl6 | 0 | 0 | 0.180646022 | 6123 | 345 |
| chr2\_25941469\_25937946\_-3523-Camsap1 | chr2 | Camsap1 | 0.608389058 | 0 | 0 | 3524 | 2545 |
| chr2\_25966948\_25944426\_-22522-Camsap1 | chr2 | Camsap1 | 0.405592706 | 0 | 0 | 22523 | 1123 |
| chr2\_25966948\_25952678\_-14270-Camsap1 | chr2 | Camsap1 | 0 | 0 | 0.541938067 | 14271 | 708 |
| chr2\_26014965\_26007719\_-7246-Ubac1 | chr2 | Ubac1 | 0 | 1.093855076 | 0 | 7247 | 629 |
| chr2\_27741943\_27737299\_+4644-Rxra | chr2 | Rxra | 0 | 0 | 0.180646022 | 4645 | 597 |
| chr2\_28665162\_28658605\_+6557-Tsc1 | chr2 | Tsc1 | 0.405592706 | 0 | 0 | 6558 | 743 |
| chr2\_29922371\_29893001\_+29370-Odf2 | chr2 | Odf2 | 0.811185411 | 1.640782614 | 1.264522156 | 29371 | 1945 |
| chr2\_29922371\_29912569\_+9802-Odf2 | chr2 | Odf2 | 1.013981764 | 0.911545897 | 0.361292045 | 9803 | 1068 |
| chr2\_29922371\_29920775\_+1596-Odf2 | chr2 | Odf2 | 0.202796353 | 0 | 0 | 1597 | 375 |
| chr2\_30111332\_30110205\_-1127-Zer1 | chr2 | Zer1 | 0.405592706 | 0.364618359 | 0 | 1128 | 804 |
| chr2\_30304401\_30298416\_+5985-Nup188 | chr2 | Nup188 | 0 | 0 | 0.180646022 | 5986 | 498 |
| chr2\_30329413\_30315116\_+14297-Nup188 | chr2 | Nup188 | 0.202796353 | 0 | 0 | 14298 | 1437 |
| chr2\_31097150\_31096027\_-1123-na | chr2 | na | 0 | 0 | 0.090323011 | 1124 | 1124 |
| chr2\_31174239\_31167021\_+7218-Gpr107 | chr2 | Gpr107 | 0 | 0.182309179 | 0.541938067 | 7219 | 435 |
| chr2\_31989139\_31988154\_+985-Nup214 | chr2 | Nup214 | 0 | 0 | 0.090323011 | 986 | 174 |
| chr2\_32034969\_32017026\_+17943-Nup214 | chr2 | Nup214 | 0 | 0 | 0.180646022 | 17944 | 2646 |
| chr2\_32187553\_32182458\_+5095-Prrc2b | chr2 | Prrc2b | 0.405592706 | 0 | 0 | 5096 | 523 |
| chr2\_32194996\_32182458\_+12538-Prrc2b | chr2 | Prrc2b | 0.202796353 | 0 | 0.361292045 | 12539 | 1171 |
| chr2\_32204324\_32182458\_+21866-Prrc2b | chr2 | Prrc2b | 0 | 0 | 0.180646022 | 21867 | 1771 |
| chr2\_32808062\_32802754\_-5308-Stxbp1 | chr2 | Stxbp1 | 0.202796353 | 0 | 0 | 5309 | 347 |
| chr2\_32981883\_32980002\_-1881-Slc2a8 | chr2 | Slc2a8 | 0 | 0 | 0.180646022 | 1882 | 470 |
| chr2\_33834633\_33825048\_-9585-Mvb12b | chr2 | Mvb12b | 0 | 0.364618359 | 0 | 9586 | 350 |
| chr2\_34444406\_34432003\_+12403-Mapkap1 | chr2 | Mapkap1 | 0 | 0.182309179 | 0 | 12404 | 567 |
| chr2\_34695608\_34691106\_-4502-Gapvd1 | chr2 | Gapvd1 | 0.202796353 | 0 | 0 | 4503 | 363 |
| chr2\_34725513\_34725043\_-470-Gapvd1 | chr2 | Gapvd1 | 0 | 0.364618359 | 0 | 471 | 325 |
| chr2\_36240954\_36240596\_+358-Ptgs1 | chr2 | Ptgs1 | 0.811185411 | 0 | 0 | 359 | 266 |
| chr2\_36322923\_36322418\_+505-na | chr2 | na | 0 | 0 | 0.361292045 | 506 | 506 |
| chr2\_37473783\_37469377\_+4406-Rabgap1 | chr2 | Rabgap1 | 0 | 0.182309179 | 0 | 4407 | 625 |
| chr2\_37489833\_37469377\_+20456-Rabgap1 | chr2 | Rabgap1 | 0 | 0 | 0.180646022 | 20457 | 1239 |
| chr2\_37627526\_37580673\_-46853-Strbp | chr2 | Strbp | 0 | 0.182309179 | 0 | 46854 | 4841 |
| chr2\_37647285\_37580673\_-66612-Strbp | chr2 | Strbp | 0.202796353 | 0 | 0 | 66613 | 5543 |
| chr2\_37647285\_37624173\_-23112-Strbp | chr2 | Strbp | 0.202796353 | 0.182309179 | 0.722584089 | 23113 | 1212 |
| chr2\_37647285\_37640851\_-6434-Strbp | chr2 | Strbp | 0 | 0 | 0.180646022 | 6435 | 557 |
| chr2\_37697911\_37580673\_-117238-Strbp | chr2 | Strbp | 0.202796353 | 0 | 0 | 117239 | 117239 |
| chr2\_37844908\_37844777\_-131-Dennd1a | chr2 | Dennd1a | 0 | 0 | 0.180646022 | 132 | 132 |
| chr2\_39024298\_39022701\_-1597-Golga1 | chr2 | Golga1 | 0.202796353 | 0 | 0 | 1598 | 471 |
| chr2\_44828067\_44825351\_-2716-Gtdc1 | chr2 | Gtdc1 | 0 | 0.182309179 | 0 | 2717 | 2717 |
| chr2\_4484132\_4431199\_+52933-Frmd4a | chr2 | Frmd4a | 0.405592706 | 0 | 0 | 52934 | 254 |
| chr2\_48155892\_48155316\_-576-Gm13481 | chr2 | Gm13481 | 0 | 0.546927538 | 0 | 577 | 577 |
| chr2\_48156266\_48155316\_-950-Gm13481 | chr2 | Gm13481 | 0 | 0.182309179 | 0 | 951 | 951 |
| chr2\_48940400\_48927096\_-13304-Orc4 | chr2 | Orc4 | 0 | 0 | 0.180646022 | 13305 | 596 |
| chr2\_49170013\_49064705\_+105308-Mbd5 | chr2 | Mbd5 | 0 | 0 | 0.180646022 | 105309 | 105309 |
| chr2\_49170013\_49073671\_+96342-na | chr2 | na | 0 | 0 | 0.090323011 | 96343 | 96343 |
| chr2\_49170013\_49086590\_+83423-Mbd5 | chr2 | Mbd5 | 0.202796353 | 0 | 0 | 83424 | 438 |
| chr2\_49279783\_49272041\_+7742-Mbd5 | chr2 | Mbd5 | 0.405592706 | 0 | 0 | 7743 | 2432 |
| chr2\_50334658\_50332881\_+1777-na | chr2 | na | 0 | 0.182309179 | 0 | 1778 | 1778 |
| chr2\_5035083\_5024067\_-11016-Optn | chr2 | Optn | 0.202796353 | 0 | 0 | 11017 | 733 |
| chr2\_50370969\_50355025\_+15944-Gm13483 | chr2 | Gm13483 | 0.405592706 | 0.729236718 | 0.541938067 | 15945 | 15945 |
| chr2\_50387728\_50355025\_+32703-Gm13483 | chr2 | Gm13483 | 0.202796353 | 0 | 0 | 32704 | 32704 |
| chr2\_50406520\_50355025\_+51495-Gm13486 | chr2 | Gm13486 | 0 | 0.364618359 | 0 | 51496 | 51496 |
| chr2\_5054716\_5045987\_-8729-Optn | chr2 | Optn | 0 | 0 | 0.180646022 | 8730 | 593 |
| chr2\_52078520\_52074247\_+4273-Rif1 | chr2 | Rif1 | 0.202796353 | 0 | 0 | 4274 | 610 |
| chr2\_52150629\_52149160\_-1469-Neb | chr2 | Neb | 0 | 0 | 0.361292045 | 1470 | 319 |
| chr2\_52151059\_52150537\_-522-Neb | chr2 | Neb | 0 | 0 | 4.516150558 | 523 | 186 |
| chr2\_52157924\_52150967\_-6957-Neb | chr2 | Neb | 0 | 0 | 0.541938067 | 6958 | 744 |
| chr2\_52157924\_52151364\_-6560-Neb | chr2 | Neb | 0 | 0 | 0.180646022 | 6561 | 651 |
| chr2\_52157924\_52153056\_-4868-Neb | chr2 | Neb | 0 | 0.364618359 | 0.180646022 | 4869 | 558 |
| chr2\_52159569\_52151364\_-8205-Neb | chr2 | Neb | 0.202796353 | 0 | 0.180646022 | 8206 | 744 |
| chr2\_52163009\_52162905\_-104-Neb | chr2 | Neb | 0.405592706 | 0 | 0 | 105 | 105 |
| chr2\_52164702\_52161371\_-3331-Neb | chr2 | Neb | 0 | 0.182309179 | 0 | 3332 | 540 |
| chr2\_52165277\_52165167\_-110-Neb | chr2 | Neb | 0 | 0.364618359 | 0.180646022 | 111 | 111 |
| chr2\_52179566\_52177522\_-2044-Neb | chr2 | Neb | 2.027963528 | 1.276164256 | 1.806460223 | 2045 | 315 |
| chr2\_52183836\_52167560\_-16276-Neb | chr2 | Neb | 0.202796353 | 0 | 0 | 16277 | 1488 |
| chr2\_52204333\_52194380\_-9953-Neb | chr2 | Neb | 0.405592706 | 0 | 0 | 9954 | 1260 |
| chr2\_52204728\_52204307\_-421-na | chr2 | na | 0.101398176 | 0.182309179 | 0 | 422 | 422 |
| chr2\_52227555\_52227244\_-311-Neb | chr2 | Neb | 0.202796353 | 0 | 0 | 312 | 312 |
| chr2\_52249514\_52245281\_-4233-Neb | chr2 | Neb | 15.00693011 | 0 | 0 | 4234 | 729 |
| chr2\_52258904\_52232921\_-25983-Neb | chr2 | Neb | 0 | 0.364618359 | 0 | 25984 | 3645 |
| chr2\_52279948\_52277358\_-2590-Neb | chr2 | Neb | 0.202796353 | 0 | 0 | 2591 | 732 |
| chr2\_52280642\_52279632\_-1010-Neb | chr2 | Neb | 0 | 0.182309179 | 0 | 1011 | 420 |
| chr2\_52289730\_52288771\_-959-Neb | chr2 | Neb | 0 | 0 | 0.180646022 | 960 | 213 |
| chr2\_52303735\_52302442\_-1293-Neb | chr2 | Neb | 3.853130704 | 0 | 0.541938067 | 1294 | 204 |
| chr2\_53056817\_53014803\_+42014-Fmnl2 | chr2 | Fmnl2 | 0 | 0 | 0.180646022 | 42015 | 42015 |
| chr2\_53126597\_53114112\_+12485-na | chr2 | na | 0.101398176 | 0 | 0 | 12486 | 12486 |
| chr2\_5350745\_5350641\_-104-na | chr2 | na | 0.202796353 | 0 | 0 | 105 | 105 |
| chr2\_57268082\_57264156\_+3926-Gpd2 | chr2 | Gpd2 | 0.608389058 | 0 | 0 | 3927 | 3927 |
| chr2\_57290016\_57267973\_+22043-Gpd2 | chr2 | Gpd2 | 0 | 0.364618359 | 0.541938067 | 22044 | 282 |
| chr2\_57307095\_57289845\_+17250-Gpd2 | chr2 | Gpd2 | 0.202796353 | 0 | 0.541938067 | 17251 | 559 |
| chr2\_57345424\_57289845\_+55579-Gpd2 | chr2 | Gpd2 | 0.202796353 | 0 | 0 | 55580 | 1063 |
| chr2\_57345424\_57338847\_+6577-Gpd2 | chr2 | Gpd2 | 0.405592706 | 0 | 0 | 6578 | 504 |
| chr2\_5877001\_5876364\_-637-Sec61a2 | chr2 | Sec61a2 | 0 | 0.182309179 | 0 | 638 | 359 |
| chr2\_5932542\_5923869\_-8673-Dhtkd1 | chr2 | Dhtkd1 | 0.202796353 | 0 | 0 | 8674 | 833 |
| chr2\_59920538\_59912402\_-8136-Baz2b | chr2 | Baz2b | 0 | 0 | 0.180646022 | 8137 | 1541 |
| chr2\_59923755\_59911682\_-12073-Baz2b | chr2 | Baz2b | 0 | 0.182309179 | 0 | 12074 | 1992 |
| chr2\_59932170\_59907439\_-24731-Baz2b | chr2 | Baz2b | 1.013981764 | 0.546927538 | 0.361292045 | 24732 | 2765 |
| chr2\_59936751\_59900658\_-36093-Baz2b | chr2 | Baz2b | 0 | 0.182309179 | 0 | 36094 | 3813 |
| chr2\_59958492\_59948087\_-10405-Baz2b | chr2 | Baz2b | 0.608389058 | 0.182309179 | 0 | 10406 | 381 |
| chr2\_59962630\_59922143\_-40487-Baz2b | chr2 | Baz2b | 0 | 0.182309179 | 0 | 40488 | 2393 |
| chr2\_60006189\_60001506\_-4683-Baz2b | chr2 | Baz2b | 0.202796353 | 0.273463769 | 0 | 4684 | 198 |
| chr2\_60012323\_60001506\_-10817-Baz2b | chr2 | Baz2b | 0 | 0.182309179 | 0 | 10818 | 10818 |
| chr2\_60029135\_60001506\_-27629-na | chr2 | na | 0.101398176 | 0 | 0 | 27630 | 27630 |
| chr2\_6010428\_5982992\_+27436-Upf2 | chr2 | Upf2 | 0 | 0.182309179 | 0 | 27437 | 413 |
| chr2\_60443380\_60441086\_-2294-Pla2r1 | chr2 | Pla2r1 | 0 | 0.182309179 | 0 | 2295 | 241 |
| chr2\_60674728\_60668288\_-6440-Itgb6 | chr2 | Itgb6 | 0 | 0 | 0.361292045 | 6441 | 742 |
| chr2\_60797742\_60779731\_-18011-Rbms1 | chr2 | Rbms1 | 0 | 0 | 0.180646022 | 18012 | 389 |
| chr2\_61175581\_61127694\_+47887-Gm39833 | chr2 | Gm39833 | 0.202796353 | 0 | 0 | 47888 | 47888 |
| chr2\_61785559\_61776673\_+8886-Psmd14 | chr2 | Psmd14 | 0 | 0 | 1.083876134 | 8887 | 309 |
| chr2\_62286963\_62267401\_+19562-Slc4a10 | chr2 | Slc4a10 | 0 | 0.182309179 | 0 | 19563 | 823 |
| chr2\_62313349\_62267401\_+45948-Slc4a10 | chr2 | Slc4a10 | 0 | 0 | 0.180646022 | 45949 | 1785 |
| chr2\_6394555\_6391055\_+3500-Usp6nl | chr2 | Usp6nl | 0 | 0.729236718 | 0 | 3501 | 151 |
| chr2\_67519353\_67476718\_+42635-Xirp2 | chr2 | Xirp2 | 0 | 0.182309179 | 0 | 42636 | 9983 |
| chr2\_67519353\_67505034\_+14319-Xirp2 | chr2 | Xirp2 | 0.811185411 | 0.911545897 | 0.722584089 | 14320 | 9696 |
| chr2\_69696971\_69690063\_-6908-Fastkd1 | chr2 | Fastkd1 | 0 | 0 | 0.180646022 | 6909 | 620 |
| chr2\_69938312\_69914414\_+23898-Ubr3 | chr2 | Ubr3 | 0 | 0 | 0.180646022 | 23899 | 920 |
| chr2\_69959663\_69951343\_+8320-Ubr3 | chr2 | Ubr3 | 0.202796353 | 0 | 0 | 8321 | 797 |
| chr2\_69979468\_69965374\_+14094-Ubr3 | chr2 | Ubr3 | 0 | 0.182309179 | 0 | 14095 | 1121 |
| chr2\_69983225\_69973149\_+10076-Ubr3 | chr2 | Ubr3 | 0 | 0 | 0.361292045 | 10077 | 798 |
| chr2\_69983261\_69938084\_+45177-Ubr3 | chr2 | Ubr3 | 0 | 0 | 0.541938067 | 45178 | 2682 |
| chr2\_69988896\_69973149\_+15747-Ubr3 | chr2 | Ubr3 | 0 | 0 | 0.180646022 | 15748 | 945 |
| chr2\_69988896\_69977719\_+11177-Ubr3 | chr2 | Ubr3 | 0.202796353 | 0 | 0 | 11178 | 484 |
| chr2\_69993812\_69914414\_+79398-Ubr3 | chr2 | Ubr3 | 0 | 0.182309179 | 0 | 79399 | 3834 |
| chr2\_70786995\_70754440\_-32555-Tlk1 | chr2 | Tlk1 | 0 | 0.182309179 | 0 | 32556 | 383 |
| chr2\_70786995\_70786877\_-118-Tlk1 | chr2 | Tlk1 | 0 | 0.546927538 | 0 | 119 | 119 |
| chr2\_71282610\_71275094\_-7516-Slc25a12 | chr2 | Slc25a12 | 0.202796353 | 0 | 0 | 7517 | 790 |
| chr2\_71512168\_71506785\_+5383-Metap1d | chr2 | Metap1d | 0.202796353 | 0.182309179 | 0.361292045 | 5384 | 2021 |
| chr2\_71888994\_71875406\_+13588-Pdk1 | chr2 | Pdk1 | 0.202796353 | 0 | 0 | 13589 | 854 |
| chr2\_72384205\_72371727\_+12478-Zak | chr2 | Zak | 0.202796353 | 0 | 0 | 12479 | 329 |
| chr2\_72971514\_72970155\_-1359-Sp3 | chr2 | Sp3 | 0.202796353 | 0 | 0 | 1360 | 1360 |
| chr2\_76548372\_76540104\_+8268-Osbpl6 | chr2 | Osbpl6 | 0 | 0.182309179 | 0 | 8269 | 270 |
| chr2\_76579310\_76564784\_+14526-Osbpl6 | chr2 | Osbpl6 | 0 | 0.182309179 | 0 | 14527 | 570 |
| chr2\_76718597\_76716749\_-1848-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 1849 | 1494 |
| chr2\_76728602\_76716749\_-11853-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 11854 | 8019 |
| chr2\_76731285\_76730778\_+507-na | chr2 | na | 0.202796353 | 0.182309179 | 0.361292045 | 508 | 508 |
| chr2\_76735100\_76720480\_-14620-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 14621 | 9786 |
| chr2\_76761385\_76756267\_-5118-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 5119 | 2361 |
| chr2\_76761385\_76759838\_-1547-Ttn | chr2 | Ttn | 0 | 0.364618359 | 0 | 1548 | 588 |
| chr2\_76768684\_76761086\_-7598-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 7599 | 5355 |
| chr2\_76769456\_76762152\_-7304-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 7305 | 5346 |
| chr2\_76770577\_76769710\_+867-na | chr2 | na | 0 | 0.182309179 | 0 | 868 | 868 |
| chr2\_76770641\_76769540\_-1101-Ttn | chr2 | Ttn | 0 | 0 | 0.541938067 | 1102 | 894 |
| chr2\_76771806\_76771124\_-682-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 683 | 585 |
| chr2\_76776964\_76769938\_-7026-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 7027 | 3294 |
| chr2\_76782489\_76781964\_-525-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 526 | 434 |
| chr2\_76788819\_76788514\_-305-Ttn | chr2 | Ttn | 0.202796353 | 0.182309179 | 0 | 306 | 306 |
| chr2\_76789652\_76789261\_+391-na | chr2 | na | 0.202796353 | 0 | 0 | 392 | 392 |
| chr2\_76790384\_76779006\_-11378-Ttn | chr2 | Ttn | 0 | 0.729236718 | 0 | 11379 | 5737 |
| chr2\_76791319\_76784472\_+6847-na | chr2 | na | 0 | 0 | 0.180646022 | 6848 | 6848 |
| chr2\_76802497\_76795479\_-7018-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 7019 | 3024 |
| chr2\_76812603\_76811142\_-1461-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 1462 | 922 |
| chr2\_76827078\_76802231\_-24847-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 24848 | 5175 |
| chr2\_76831874\_76826447\_-5427-Ttn | chr2 | Ttn | 0 | 0 | 0.451615056 | 5428 | 1902 |
| chr2\_76847808\_76826075\_-21733-Ttn | chr2 | Ttn | 0 | 0.364618359 | 0 | 21734 | 4563 |
| chr2\_76848356\_76847725\_-631-Ttn | chr2 | Ttn | 0.709787235 | 0 | 0.632261078 | 632 | 162 |
| chr2\_76848642\_76848279\_-363-Ttn | chr2 | Ttn | 0 | 0.546927538 | 1.083876134 | 364 | 162 |
| chr2\_76851764\_76822451\_-29313-Ttn | chr2 | Ttn | 0 | 0.729236718 | 0 | 29314 | 6027 |
| chr2\_76852137\_76831788\_-20349-Ttn | chr2 | Ttn | 0.101398176 | 0.911545897 | 0 | 20350 | 3699 |
| chr2\_76852137\_76847388\_-4749-Ttn | chr2 | Ttn | 0.811185411 | 1.458473435 | 0.722584089 | 4750 | 1296 |
| chr2\_76852137\_76850570\_-1567-Ttn | chr2 | Ttn | 0 | 0 | 0.903230112 | 1568 | 366 |
| chr2\_76853688\_76803293\_-50395-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 50396 | 10494 |
| chr2\_76853928\_76852834\_-1094-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 1095 | 330 |
| chr2\_76856366\_76847388\_-8978-Ttn | chr2 | Ttn | 0 | 1.458473435 | 0.361292045 | 8979 | 1878 |
| chr2\_76856366\_76850570\_-5796-Ttn | chr2 | Ttn | 0 | 0 | 1.083876134 | 5797 | 948 |
| chr2\_76856366\_76853605\_-2761-Ttn | chr2 | Ttn | 0.202796353 | 1.640782614 | 1.264522156 | 2762 | 414 |
| chr2\_76856904\_76848559\_-8345-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 8346 | 1734 |
| chr2\_76857987\_76847388\_-10599-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 10600 | 2298 |
| chr2\_76857987\_76854150\_-3837-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 3838 | 672 |
| chr2\_76859997\_76853851\_-6146-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 6147 | 921 |
| chr2\_76861177\_76857904\_-3273-Ttn | chr2 | Ttn | 0 | 0.364618359 | 0 | 3274 | 336 |
| chr2\_76862427\_76861097\_-1330-Ttn | chr2 | Ttn | 0 | 0.546927538 | 0 | 1331 | 324 |
| chr2\_76868320\_76867194\_+1126-na | chr2 | na | 0 | 0.182309179 | 0 | 1127 | 1127 |
| chr2\_76873998\_76857904\_-16094-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 16095 | 3099 |
| chr2\_76884197\_76847388\_-36809-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 36810 | 8715 |
| chr2\_76884197\_76857904\_-26293-Ttn | chr2 | Ttn | 2.433556234 | 0.729236718 | 0 | 26294 | 6501 |
| chr2\_76884633\_76881064\_-3569-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 3570 | 1137 |
| chr2\_76885403\_76878674\_-6729-Ttn | chr2 | Ttn | 0.405592706 | 0 | 0 | 6730 | 2823 |
| chr2\_76885775\_76881064\_-4711-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 4712 | 1974 |
| chr2\_76893177\_76857904\_-35273-Ttn | chr2 | Ttn | 0 | 0.364618359 | 0 | 35274 | 11577 |
| chr2\_76893177\_76892899\_-278-Ttn | chr2 | Ttn | 15.51392099 | 5.83389374 | 2.167752268 | 279 | 279 |
| chr2\_76894423\_76857904\_-36519-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 36520 | 11859 |
| chr2\_76894423\_76894142\_-281-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 282 | 282 |
| chr2\_76894902\_76894142\_-760-Ttn | chr2 | Ttn | 0.608389058 | 0.546927538 | 0.180646022 | 761 | 561 |
| chr2\_76894902\_76894624\_-278-Ttn | chr2 | Ttn | 0.608389058 | 0.820391307 | 0 | 279 | 279 |
| chr2\_76896202\_76894142\_-2060-Ttn | chr2 | Ttn | 0.405592706 | 0 | 0 | 2061 | 1407 |
| chr2\_76896202\_76895142\_-1060-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 1061 | 846 |
| chr2\_76896980\_76896320\_-660-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 661 | 561 |
| chr2\_76897400\_76897122\_-278-Ttn | chr2 | Ttn | 1.41957447 | 0 | 0.722584089 | 279 | 279 |
| chr2\_76898723\_76898445\_-278-Ttn | chr2 | Ttn | 0.202796353 | 0.182309179 | 0 | 279 | 279 |
| chr2\_76902122\_76888886\_-13236-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0.180646022 | 13237 | 7995 |
| chr2\_76902122\_76894624\_-7498-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 7499 | 5172 |
| chr2\_76902122\_76901841\_-281-Ttn | chr2 | Ttn | 0 | 0 | 0.722584089 | 282 | 282 |
| chr2\_76906532\_76853605\_-52927-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 52928 | 18624 |
| chr2\_76906532\_76857904\_-48628-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0.180646022 | 48629 | 17874 |
| chr2\_76906532\_76859914\_-46618-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 46619 | 17703 |
| chr2\_76906532\_76903063\_-3469-Ttn | chr2 | Ttn | 0.202796353 | 0.182309179 | 0.180646022 | 3470 | 843 |
| chr2\_76906532\_76906254\_-278-Ttn | chr2 | Ttn | 0.608389058 | 0 | 0 | 279 | 279 |
| chr2\_76927275\_76927087\_-188-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0.180646022 | 189 | 189 |
| chr2\_76934370\_76934139\_-231-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 232 | 232 |
| chr2\_76937833\_76936382\_-1451-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 1452 | 569 |
| chr2\_76939307\_76937573\_-1734-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 1735 | 1047 |
| chr2\_76939307\_76939044\_-263-Ttn | chr2 | Ttn | 3.041945292 | 0.911545897 | 0.903230112 | 264 | 264 |
| chr2\_76940110\_76934139\_-5971-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 5972 | 1848 |
| chr2\_76942439\_76934139\_-8300-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 8301 | 2373 |
| chr2\_76943467\_76943021\_-446-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0.722584089 | 447 | 366 |
| chr2\_76948072\_76946392\_-1680-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 1681 | 694 |
| chr2\_76951707\_76921551\_-30156-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 30157 | 7644 |
| chr2\_76952049\_76951315\_-734-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 735 | 407 |
| chr2\_76952178\_76906254\_-45924-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 45925 | 10828 |
| chr2\_76952178\_76942847\_-9331-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 9332 | 4498 |
| chr2\_76955088\_76724778\_-230310-Ttn | chr2 | Ttn | 0 | 0 | 0.361292045 | 230311 | 89911 |
| chr2\_76955088\_76921551\_-33537-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0 | 33538 | 8674 |
| chr2\_76955088\_76927087\_-28001-Ttn | chr2 | Ttn | 0.202796353 | 0 | 0.180646022 | 28002 | 8242 |
| chr2\_76969292\_76969140\_-152-Ttn | chr2 | Ttn | 0 | 0.182309179 | 0 | 153 | 153 |
| chr2\_76977296\_76921551\_-55745-na | chr2 | na | 0 | 0 | 0.180646022 | 55746 | 55746 |
| chr2\_76977296\_76967054\_-10242-Ttn | chr2 | Ttn | 0 | 0 | 0.903230112 | 10243 | 1574 |
| chr2\_76980195\_76977093\_-3102-Ttn | chr2 | Ttn | 0 | 0 | 0.180646022 | 3103 | 308 |
| chr2\_79658349\_79657147\_+1202-Ssfa2 | chr2 | Ssfa2 | 0 | 0 | 0.180646022 | 1203 | 1203 |
| chr2\_80530303\_80512677\_-17626-Nckap1 | chr2 | Nckap1 | 0 | 0.182309179 | 0 | 17627 | 1377 |
| chr2\_80540225\_80535320\_-4905-na | chr2 | na | 0 | 0 | 0.090323011 | 4906 | 4906 |
| chr2\_80545146\_80530158\_-14988-Nckap1 | chr2 | Nckap1 | 0 | 0 | 0.180646022 | 14989 | 838 |
| chr2\_84377045\_84368547\_-8498-Calcrl | chr2 | Calcrl | 0 | 0.364618359 | 0 | 8499 | 749 |
| chr2\_84855649\_84854412\_+1237-Slc43a1 | chr2 | Slc43a1 | 0 | 0.182309179 | 0 | 1238 | 313 |
| chr2\_91004862\_91001006\_+3856-Celf1 | chr2 | Celf1 | 0 | 0 | 0.722584089 | 3857 | 509 |
| chr2\_91262943\_91260404\_+2539-Pacsin3 | chr2 | Pacsin3 | 0 | 0.182309179 | 0 | 2540 | 725 |
| chr2\_91591791\_91585722\_+6069-Ckap5 | chr2 | Ckap5 | 0.202796353 | 0 | 0 | 6070 | 546 |
| chr2\_91712865\_91712080\_+785-Harbi1 | chr2 | Harbi1 | 0 | 0.364618359 | 0 | 786 | 786 |
| chr2\_91769087\_91766447\_+2640-Ambra1 | chr2 | Ambra1 | 0.202796353 | 0 | 0 | 2641 | 670 |
| chr2\_92230724\_92214049\_+16675-na | chr2 | na | 0.304194529 | 0.546927538 | 0.451615056 | 16676 | 16676 |
| chr2\_92236842\_92214049\_+22793-na | chr2 | na | 0 | 0.182309179 | 0 | 22794 | 22794 |
| chr2\_92252922\_92214049\_+38873-na | chr2 | na | 0 | 0.09115459 | 0 | 38874 | 38874 |
| chr2\_93806141\_93795635\_-10506-Ext2 | chr2 | Ext2 | 0 | 0.364618359 | 0 | 10507 | 453 |
| chr2\_93813964\_93795635\_-18329-Ext2 | chr2 | Ext2 | 0 | 0 | 0.180646022 | 18330 | 1109 |
| chr2\_93813964\_93806025\_-7939-Ext2 | chr2 | Ext2 | 0.202796353 | 0 | 0 | 7940 | 773 |
| chr2\_94008592\_94003053\_-5539-Alkbh3 | chr2 | Alkbh3 | 0.202796353 | 0 | 0 | 5540 | 441 |
| chr3\_100182753\_100169936\_+12817-Gdap2 | chr3 | Gdap2 | 0 | 0.182309179 | 0 | 12818 | 700 |
| chr3\_103029212\_103028789\_+423-Csde1 | chr3 | Csde1 | 0.202796353 | 0 | 0 | 424 | 424 |
| chr3\_103052931\_103039933\_+12998-Csde1 | chr3 | Csde1 | 0 | 0.182309179 | 0 | 12999 | 1674 |
| chr3\_103092464\_103085307\_+7157-Ampd1 | chr3 | Ampd1 | 0 | 0.182309179 | 0 | 7158 | 1007 |
| chr3\_103095762\_103079029\_+16733-Ampd1 | chr3 | Ampd1 | 0.405592706 | 0 | 0 | 16734 | 1760 |
| chr3\_104479850\_104465487\_-14363-Lrig2 | chr3 | Lrig2 | 0.202796353 | 0 | 0 | 14364 | 836 |
| chr3\_104497554\_104479782\_-17772-Lrig2 | chr3 | Lrig2 | 0.202796353 | 0 | 0 | 17773 | 1074 |
| chr3\_104497554\_104480109\_-17445-Lrig2 | chr3 | Lrig2 | 0 | 0.182309179 | 0 | 17446 | 1005 |
| chr3\_104892311\_104882793\_+9518-St7l | chr3 | St7l | 0 | 0.182309179 | 0 | 9519 | 447 |
| chr3\_104895798\_104882793\_+13005-St7l | chr3 | St7l | 0 | 0 | 0.541938067 | 13006 | 623 |
| chr3\_106539603\_106530183\_-9420-Cept1 | chr3 | Cept1 | 0 | 0.273463769 | 0 | 9421 | 9421 |
| chr3\_107326304\_107324752\_-1552-Rbm15 | chr3 | Rbm15 | 0 | 0.546927538 | 0 | 1553 | 1553 |
| chr3\_108435966\_108431465\_-4501-Sars | chr3 | Sars | 0.202796353 | 0 | 0 | 4502 | 540 |
| chr3\_108908083\_108907787\_-296-Prpf38b | chr3 | Prpf38b | 0 | 0.364618359 | 0 | 297 | 213 |
| chr3\_113570057\_113558093\_-11964-Amy1 | chr3 | Amy1 | 0 | 0 | 0.361292045 | 11965 | 1391 |
| chr3\_116332882\_116322082\_-10800-Cdc14a | chr3 | Cdc14a | 0 | 0.182309179 | 0 | 10801 | 458 |
| chr3\_116351272\_116322082\_-29190-Cdc14a | chr3 | Cdc14a | 0.202796353 | 0 | 0 | 29191 | 588 |
| chr3\_116404618\_116348454\_-56164-Cdc14a | chr3 | Cdc14a | 0.405592706 | 0 | 0 | 56165 | 379 |
| chr3\_116404618\_116392822\_-11796-Cdc14a | chr3 | Cdc14a | 0 | 0.182309179 | 0.180646022 | 11797 | 169 |
| chr3\_116590292\_116589491\_-801-Trmt13 | chr3 | Trmt13 | 0.304194529 | 0 | 0 | 802 | 240 |
| chr3\_116621508\_116618256\_+3252-Sass6 | chr3 | Sass6 | 0 | 0 | 0.180646022 | 3253 | 810 |
| chr3\_116651499\_116645366\_-6133-Mfsd14a | chr3 | Mfsd14a | 0 | 0.182309179 | 0.180646022 | 6134 | 402 |
| chr3\_116757805\_116754873\_-2932-Agl | chr3 | Agl | 0 | 0.182309179 | 0 | 2933 | 2933 |
| chr3\_116776659\_116757555\_-19104-Agl | chr3 | Agl | 0 | 0.182309179 | 0 | 19105 | 19105 |
| chr3\_116779380\_116768786\_-10594-Agl | chr3 | Agl | 0.202796353 | 0 | 0 | 10595 | 1054 |
| chr3\_116781344\_116776529\_-4815-Agl | chr3 | Agl | 0.202796353 | 0.182309179 | 0.180646022 | 4816 | 913 |
| chr3\_116782643\_116776529\_-6114-Agl | chr3 | Agl | 8.720243171 | 6.198512099 | 6.683902826 | 6115 | 1201 |
| chr3\_116782643\_116778619\_-4024-Agl | chr3 | Agl | 1.622370823 | 2.005400973 | 2.890336357 | 4025 | 1070 |
| chr3\_116793822\_116786530\_-7292-Agl | chr3 | Agl | 0.202796353 | 0 | 0 | 7293 | 1201 |
| chr3\_121235764\_121228310\_-7454-Tmem56 | chr3 | Tmem56 | 0.202796353 | 0.182309179 | 0 | 7455 | 544 |
| chr3\_121235764\_121235043\_-721-Tmem56 | chr3 | Tmem56 | 0 | 0.182309179 | 0 | 722 | 300 |
| chr3\_121796485\_121779555\_-16930-Abcd3 | chr3 | Abcd3 | 0 | 0 | 0.180646022 | 16931 | 717 |
| chr3\_122969249\_122947361\_-21888-Usp53 | chr3 | Usp53 | 0 | 0 | 0.180646022 | 21889 | 2837 |
| chr3\_126965162\_126958883\_-6279-Ank2 | chr3 | Ank2 | 0.202796353 | 0 | 0 | 6280 | 896 |
| chr3\_126981944\_126962251\_-19693-Ank2 | chr3 | Ank2 | 0 | 0.182309179 | 0 | 19694 | 903 |
| chr3\_127011051\_127002678\_-8373-Ank2 | chr3 | Ank2 | 0 | 0 | 0.180646022 | 8374 | 396 |
| chr3\_127057091\_127032116\_-24975-Ank2 | chr3 | Ank2 | 0 | 0 | 0.361292045 | 24976 | 804 |
| chr3\_127617294\_127583584\_+33710-Zgrf1 | chr3 | Zgrf1 | 0 | 0 | 0.180646022 | 33711 | 3676 |
| chr3\_130005096\_129996681\_-8415-Sec24b | chr3 | Sec24b | 0.202796353 | 0 | 0 | 8416 | 572 |
| chr3\_130011872\_129996681\_-15191-Sec24b | chr3 | Sec24b | 0 | 0 | 0.180646022 | 15192 | 1071 |
| chr3\_130020642\_129996681\_-23961-Sec24b | chr3 | Sec24b | 3.041945292 | 2.005400973 | 1.445168179 | 23962 | 1176 |
| chr3\_130041447\_129754817\_-286630-Sec24b | chr3 | Sec24b | 0.202796353 | 0 | 0 | 286631 | 286631 |
| chr3\_132752669\_132705513\_+47156-Tbck | chr3 | Tbck | 0.405592706 | 0 | 0 | 47157 | 1927 |
| chr3\_132774596\_132705513\_+69083-Tbck | chr3 | Tbck | 0 | 0 | 0.180646022 | 69084 | 2103 |
| chr3\_132774596\_132751187\_+23409-Tbck | chr3 | Tbck | 0 | 0.182309179 | 0 | 23410 | 375 |
| chr3\_132815349\_132751187\_+64162-Tbck | chr3 | Tbck | 0.202796353 | 0.182309179 | 0 | 64163 | 711 |
| chr3\_132917553\_132904658\_-12895-Npnt | chr3 | Npnt | 0 | 0.182309179 | 0 | 12896 | 1080 |
| chr3\_133488717\_133485512\_-3205-Tet2 | chr3 | Tet2 | 0.202796353 | 0.182309179 | 0.180646022 | 3206 | 3206 |
| chr3\_135524627\_135506909\_+17718-Manba | chr3 | Manba | 0 | 0 | 0.180646022 | 17719 | 885 |
| chr3\_135524627\_135511803\_+12824-Manba | chr3 | Manba | 0 | 0.182309179 | 0 | 12825 | 684 |
| chr3\_135669339\_135626595\_-42744-Nfkb1 | chr3 | Nfkb1 | 0 | 0.182309179 | 0 | 42745 | 492 |
| chr3\_135669339\_135655500\_-13839-Nfkb1 | chr3 | Nfkb1 | 0 | 0 | 0.722584089 | 13840 | 326 |
| chr3\_136797926\_136797726\_+200-Ppp3ca | chr3 | Ppp3ca | 0 | 0.546927538 | 0 | 201 | 201 |
| chr3\_136835594\_136834544\_-1050-na | chr3 | na | 0.202796353 | 0 | 0 | 1051 | 1051 |
| chr3\_136881540\_136797726\_+83814-Ppp3ca | chr3 | Ppp3ca | 0 | 0.364618359 | 0 | 83815 | 724 |
| chr3\_137908619\_137885273\_+23346-Dnajb14 | chr3 | Dnajb14 | 0 | 0 | 0.180646022 | 23347 | 1157 |
| chr3\_137908619\_137902187\_+6432-Dnajb14 | chr3 | Dnajb14 | 0 | 0 | 0.180646022 | 6433 | 839 |
| chr3\_138478930\_138472151\_-6779-Metap1 | chr3 | Metap1 | 0.811185411 | 0 | 0 | 6780 | 376 |
| chr3\_138969975\_138955322\_-14653-Rap1gds1 | chr3 | Rap1gds1 | 0 | 0 | 0.361292045 | 14654 | 1004 |
| chr3\_141857596\_141856349\_-1247-Bmpr1b | chr3 | Bmpr1b | 0.202796353 | 0 | 0 | 1248 | 491 |
| chr3\_142352885\_142352734\_-151-Pdlim5 | chr3 | Pdlim5 | 0 | 0.364618359 | 0.180646022 | 152 | 152 |
| chr3\_142839362\_142828881\_-10481-Pkn2 | chr3 | Pkn2 | 0 | 0 | 0.180646022 | 10482 | 633 |
| chr3\_144712728\_144705513\_-7215-Sh3glb1 | chr3 | Sh3glb1 | 0 | 0.182309179 | 0 | 7216 | 498 |
| chr3\_145315417\_145313991\_+1426-Col24a1 | chr3 | Col24a1 | 0 | 0 | 0.180646022 | 1427 | 1427 |
| chr3\_145492347\_145484646\_+7701-Col24a1 | chr3 | Col24a1 | 0 | 0.182309179 | 0 | 7702 | 324 |
| chr3\_145524299\_145491067\_+33232-Col24a1 | chr3 | Col24a1 | 0 | 0.182309179 | 0 | 33233 | 648 |
| chr3\_146493843\_146457078\_-36765-Spata1 | chr3 | Spata1 | 0.202796353 | 0 | 0 | 36766 | 36766 |
| chr3\_146493843\_146463185\_-30658-Spata1 | chr3 | Spata1 | 0 | 0.182309179 | 0 | 30659 | 1519 |
| chr3\_146495151\_146457078\_-38073-Spata1 | chr3 | Spata1 | 0.202796353 | 0 | 0 | 38074 | 38074 |
| chr3\_146495151\_146487200\_-7951-Spata1 | chr3 | Spata1 | 0.405592706 | 0 | 0 | 7952 | 7952 |
| chr3\_146748047\_146737934\_-10113-Prkacb | chr3 | Prkacb | 0 | 0.182309179 | 0 | 10114 | 511 |
| chr3\_146757768\_146732382\_-25386-Prkacb | chr3 | Prkacb | 0.202796353 | 0 | 0 | 25387 | 1216 |
| chr3\_146915789\_146886391\_+29398-Ttll7 | chr3 | Ttll7 | 0 | 0 | 0.180646022 | 29399 | 29399 |
| chr3\_146931613\_146901324\_+30289-Ttll7 | chr3 | Ttll7 | 0.405592706 | 0 | 0.180646022 | 30290 | 1153 |
| chr3\_146961764\_146901324\_+60440-Ttll7 | chr3 | Ttll7 | 0 | 0.546927538 | 0 | 60441 | 2097 |
| chr3\_148859533\_148858733\_-800-Adgrl2 | chr3 | Adgrl2 | 0.202796353 | 0 | 0 | 801 | 801 |
| chr3\_152364047\_152357840\_+6207-Usp33 | chr3 | Usp33 | 0 | 0 | 0.361292045 | 6208 | 575 |
| chr3\_152428832\_152420015\_+8817-Zzz3 | chr3 | Zzz3 | 0.405592706 | 0.364618359 | 0.180646022 | 8818 | 1836 |
| chr3\_152428847\_152420015\_+8832-Zzz3 | chr3 | Zzz3 | 0 | 0 | 0.180646022 | 8833 | 1851 |
| chr3\_152747773\_152734513\_+13260-Pigk | chr3 | Pigk | 0 | 0.182309179 | 0 | 13261 | 841 |
| chr3\_152766523\_152738186\_+28337-Pigk | chr3 | Pigk | 0.202796353 | 0 | 0 | 28338 | 973 |
| chr3\_152846670\_152821528\_-25142-St6galnac5 | chr3 | St6galnac5 | 0 | 0 | 0.180646022 | 25143 | 733 |
| chr3\_19229768\_19227476\_-2292-Pde7a | chr3 | Pde7a | 0 | 0 | 0.180646022 | 2293 | 447 |
| chr3\_19243201\_19227476\_-15725-Pde7a | chr3 | Pde7a | 0 | 0 | 0.180646022 | 15726 | 1503 |
| chr3\_19672997\_19670924\_+2073-Trim55 | chr3 | Trim55 | 0 | 0 | 0.180646022 | 2074 | 624 |
| chr3\_20108123\_20064566\_+43557-Hltf | chr3 | Hltf | 0 | 0 | 0.180646022 | 43558 | 2089 |
| chr3\_20125477\_19256778\_-868699-Hps3 | chr3 | Hps3 | 0 | 0 | 0.361292045 | 868700 | 868700 |
| chr3\_27470346\_27451314\_-19032-Fndc3b | chr3 | Fndc3b | 0.202796353 | 0 | 0 | 19033 | 1541 |
| chr3\_27957337\_27951487\_+5850-na | chr3 | na | 0 | 0.09115459 | 0 | 5851 | 5851 |
| chr3\_28056544\_28044944\_+11600-Pld1 | chr3 | Pld1 | 0.202796353 | 0 | 0 | 11601 | 469 |
| chr3\_28120828\_28085786\_+35042-Pld1 | chr3 | Pld1 | 0 | 0.364618359 | 0 | 35043 | 861 |
| chr3\_28577573\_28493967\_+83606-Tnik | chr3 | Tnik | 0 | 0 | 0.541938067 | 83607 | 1098 |
| chr3\_28638517\_28454908\_+183609-Tnik | chr3 | Tnik | 0 | 0 | 0.180646022 | 183610 | 183610 |
| chr3\_28638517\_28493967\_+144550-Tnik | chr3 | Tnik | 0 | 0 | 0.180646022 | 144551 | 2607 |
| chr3\_29987177\_29977259\_-9918-Mecom | chr3 | Mecom | 0 | 0.182309179 | 0.180646022 | 9919 | 1750 |
| chr3\_30238321\_30237978\_-343-Mecom | chr3 | Mecom | 0 | 0.182309179 | 0 | 344 | 344 |
| chr3\_30942652\_30907048\_-35604-Phc3 | chr3 | Phc3 | 0 | 0 | 0.361292045 | 35605 | 2673 |
| chr3\_30942652\_30914095\_-28557-Phc3 | chr3 | Phc3 | 0 | 0.182309179 | 0.180646022 | 28558 | 2230 |
| chr3\_30951031\_30914095\_-36936-Phc3 | chr3 | Phc3 | 0 | 0 | 0.180646022 | 36937 | 2485 |
| chr3\_32555541\_32544067\_+11474-Mfn1 | chr3 | Mfn1 | 0 | 0 | 0.180646022 | 11475 | 439 |
| chr3\_32865966\_32847810\_+18156-Usp13 | chr3 | Usp13 | 0 | 0.182309179 | 0 | 18157 | 511 |
| chr3\_32865966\_32854556\_+11410-Usp13 | chr3 | Usp13 | 0.405592706 | 0 | 0 | 11411 | 450 |
| chr3\_32865966\_32858736\_+7230-Usp13 | chr3 | Usp13 | 0.202796353 | 0 | 0 | 7231 | 7231 |
| chr3\_32876972\_32861771\_+15201-Usp13 | chr3 | Usp13 | 0 | 0 | 0.180646022 | 15202 | 423 |
| chr3\_32881508\_32861771\_+19737-Usp13 | chr3 | Usp13 | 0 | 0 | 0.180646022 | 19738 | 611 |
| chr3\_32886588\_32861771\_+24817-Usp13 | chr3 | Usp13 | 0.608389058 | 0 | 0.361292045 | 24818 | 777 |
| chr3\_32886588\_32876878\_+9710-Usp13 | chr3 | Usp13 | 0 | 0 | 0.180646022 | 9711 | 449 |
| chr3\_32919070\_32894764\_+24306-Usp13 | chr3 | Usp13 | 0.202796353 | 0 | 0 | 24307 | 1150 |
| chr3\_32931742\_32855268\_+76474-Usp13 | chr3 | Usp13 | 0 | 0 | 0.180646022 | 76475 | 76475 |
| chr3\_32931742\_32914099\_+17643-Usp13 | chr3 | Usp13 | 0.202796353 | 0 | 0 | 17644 | 691 |
| chr3\_35841115\_35831366\_+9749-Atp11b | chr3 | Atp11b | 0 | 0.182309179 | 0 | 9750 | 895 |
| chr3\_35855256\_35831366\_+23890-Atp11b | chr3 | Atp11b | 0.202796353 | 0 | 0 | 23891 | 1304 |
| chr3\_36662933\_36650048\_-12885-Trpc3 | chr3 | Trpc3 | 0 | 0.182309179 | 0 | 12886 | 805 |
| chr3\_41717864\_41647445\_-70419-Sclt1 | chr3 | Sclt1 | 0 | 0 | 0.180646022 | 70420 | 1539 |
| chr3\_51326032\_51294093\_-31939-Elf2 | chr3 | Elf2 | 0.101398176 | 0 | 0 | 31940 | 577 |
| chr3\_51326032\_51299783\_-26249-Elf2 | chr3 | Elf2 | 0.202796353 | 0 | 0 | 26250 | 584 |
| chr3\_51326035\_51294093\_-31942-Elf2 | chr3 | Elf2 | 0.202796353 | 0.182309179 | 0.180646022 | 31943 | 580 |
| chr3\_51456003\_51438339\_+17664-Naa15 | chr3 | Naa15 | 0 | 0.182309179 | 0 | 17665 | 1118 |
| chr3\_51542833\_51526845\_-15988-Setd7 | chr3 | Setd7 | 0.202796353 | 0 | 0 | 15989 | 750 |
| chr3\_52094068\_52093182\_-886-na | chr3 | na | 0.405592706 | 0 | 0 | 887 | 887 |
| chr3\_5245645\_5241670\_+3975-Zfhx4 | chr3 | Zfhx4 | 0.608389058 | 1.276164256 | 0 | 3976 | 3133 |
| chr3\_53012964\_52998257\_-14707-Cog6 | chr3 | Cog6 | 0 | 0.364618359 | 0 | 14708 | 797 |
| chr3\_59042413\_59031546\_+10867-Med12l | chr3 | Med12l | 0 | 0 | 0.180646022 | 10868 | 490 |
| chr3\_59093695\_59091407\_+2288-Med12l | chr3 | Med12l | 0 | 0.182309179 | 0 | 2289 | 497 |
| chr3\_59235208\_59227683\_+7525-Med12l | chr3 | Med12l | 0 | 0 | 0.180646022 | 7526 | 575 |
| chr3\_60370654\_60370212\_-442-na | chr3 | na | 0.202796353 | 0 | 0 | 443 | 443 |
| chr3\_60529804\_60528756\_+1048-Mbnl1 | chr3 | Mbnl1 | 0.202796353 | 0.546927538 | 0 | 1049 | 1049 |
| chr3\_60595764\_60595594\_+170-Mbnl1 | chr3 | Mbnl1 | 0 | 0 | 0.180646022 | 171 | 171 |
| chr3\_60613520\_60595594\_+17926-Mbnl1 | chr3 | Mbnl1 | 0 | 0 | 0.180646022 | 17927 | 741 |
| chr3\_60615773\_60613263\_+2510-Mbnl1 | chr3 | Mbnl1 | 0.202796353 | 0 | 0 | 2511 | 466 |
| chr3\_63954004\_63943222\_-10782-Slc33a1 | chr3 | Slc33a1 | 0.405592706 | 0 | 0 | 10783 | 905 |
| chr3\_63993973\_63985600\_+8373-Gmps | chr3 | Gmps | 0 | 0.546927538 | 0 | 8374 | 888 |
| chr3\_64140804\_64086471\_+54333-Vmn2r1 | chr3 | Vmn2r1 | 0 | 0.182309179 | 0 | 54334 | 1284 |
| chr3\_67007645\_66994517\_+13128-Rsrc1 | chr3 | Rsrc1 | 0 | 0.364618359 | 0 | 13129 | 13129 |
| chr3\_79515249\_79500338\_-14911-Fnip2 | chr3 | Fnip2 | 0.202796353 | 0 | 0 | 14912 | 713 |
| chr3\_79518191\_79506207\_-11984-na | chr3 | na | 0 | 0 | 0.090323011 | 11985 | 11985 |
| chr3\_84519703\_84509808\_-9895-Arfip1 | chr3 | Arfip1 | 0 | 0 | 0.180646022 | 9896 | 555 |
| chr3\_84904079\_84863274\_+40805-Fbxw7 | chr3 | Fbxw7 | 0 | 0.364618359 | 0 | 40806 | 40806 |
| chr3\_84904079\_84903501\_+578-Fbxw7 | chr3 | Fbxw7 | 0.202796353 | 0 | 0.722584089 | 579 | 579 |
| chr3\_85636539\_85632682\_-3857-na | chr3 | na | 0 | 0 | 0.361292045 | 3858 | 3858 |
| chr3\_85676261\_85672223\_-4038-Fam160a1 | chr3 | Fam160a1 | 0.405592706 | 0 | 0 | 4039 | 1448 |
| chr3\_85730885\_85720416\_-10469-Fam160a1 | chr3 | Fam160a1 | 0.608389058 | 0 | 0.541938067 | 10470 | 873 |
| chr3\_85741374\_85720416\_-20958-Fam160a1 | chr3 | Fam160a1 | 0.405592706 | 0 | 0.180646022 | 20959 | 1097 |
| chr3\_85741374\_85730259\_-11115-Fam160a1 | chr3 | Fam160a1 | 0.202796353 | 0 | 0.361292045 | 11116 | 851 |
| chr3\_85817291\_85730259\_-87032-Fam160a1 | chr3 | Fam160a1 | 0 | 0.182309179 | 0 | 87033 | 87033 |
| chr3\_86417996\_86291427\_+126569-Lrba | chr3 | Lrba | 0.405592706 | 0.364618359 | 0.180646022 | 126570 | 5211 |
| chr3\_86445473\_86291427\_+154046-Lrba | chr3 | Lrba | 0 | 0.182309179 | 0 | 154047 | 5378 |
| chr3\_86664590\_86372078\_+292512-Lrba | chr3 | Lrba | 0 | 0.364618359 | 0 | 292513 | 1925 |
| chr3\_87100673\_87097742\_-2931-Kirrel | chr3 | Kirrel | 0.202796353 | 0.182309179 | 0 | 2932 | 2932 |
| chr3\_88156525\_88155678\_+847-Mef2d | chr3 | Mef2d | 0 | 0 | 0.180646022 | 848 | 389 |
| chr3\_88159592\_88155678\_+3914-Mef2d | chr3 | Mef2d | 0.202796353 | 0 | 0 | 3915 | 795 |
| chr3\_88163087\_88155678\_+7409-Mef2d | chr3 | Mef2d | 0 | 0.182309179 | 0 | 7410 | 1137 |
| chr3\_88351581\_88350016\_+1565-Smg5 | chr3 | Smg5 | 0.202796353 | 0.364618359 | 0 | 1566 | 950 |
| chr3\_88353138\_88346445\_+6693-Smg5 | chr3 | Smg5 | 0.202796353 | 0 | 0 | 6694 | 1521 |
| chr3\_88700514\_88699951\_+563-2810403A07Rik | chr3 | 2810403A07Rik | 0.405592706 | 0.455772948 | 0 | 564 | 312 |
| chr3\_88907582\_88905452\_+2130-Gon4l | chr3 | Gon4l | 0.608389058 | 0 | 0 | 2131 | 322 |
| chr3\_88985790\_88964674\_+21116-Ash1l | chr3 | Ash1l | 0.202796353 | 0 | 0.361292045 | 21117 | 21117 |
| chr3\_88985790\_88981233\_+4557-Ash1l | chr3 | Ash1l | 0 | 0.182309179 | 0 | 4558 | 4558 |
| chr3\_89007877\_88964674\_+43203-Ash1l | chr3 | Ash1l | 0.202796353 | 0.182309179 | 0.180646022 | 43204 | 43204 |
| chr3\_89007877\_88965812\_+42065-Ash1l | chr3 | Ash1l | 0.202796353 | 0.546927538 | 0.541938067 | 42066 | 6061 |
| chr3\_89007877\_88999728\_+8149-Ash1l | chr3 | Ash1l | 0 | 0 | 0.180646022 | 8150 | 986 |
| chr3\_89007877\_89007142\_+735-Ash1l | chr3 | Ash1l | 0.202796353 | 0.364618359 | 0 | 736 | 736 |
| chr3\_89023210\_89007142\_+16068-Ash1l | chr3 | Ash1l | 0 | 0 | 0.541938067 | 16069 | 916 |
| chr3\_89033332\_88965812\_+67520-na | chr3 | na | 0 | 0.09115459 | 0 | 67521 | 67521 |
| chr3\_89054517\_88965812\_+88705-Ash1l | chr3 | Ash1l | 0 | 0 | 0.180646022 | 88706 | 7295 |
| chr3\_89058640\_89023031\_+35609-Ash1l | chr3 | Ash1l | 0 | 0.182309179 | 0 | 35610 | 1535 |
| chr3\_89076277\_89063786\_+12491-Ash1l | chr3 | Ash1l | 0 | 0.182309179 | 0 | 12492 | 1382 |
| chr3\_90047899\_90034065\_-13834-Ubap2l | chr3 | Ubap2l | 0 | 0 | 0.541938067 | 13835 | 776 |
| chr3\_90278547\_90276880\_+1667-Dennd4b | chr3 | Dennd4b | 0.202796353 | 0 | 0 | 1668 | 1061 |
| chr3\_90354510\_90350387\_+4123-Gatad2b | chr3 | Gatad2b | 0 | 0 | 0.541938067 | 4124 | 822 |
| chr3\_9265420\_9264535\_+885-Zbtb10 | chr3 | Zbtb10 | 0.202796353 | 0 | 0.361292045 | 886 | 886 |
| chr3\_94393140\_94391074\_+2066-Rorc | chr3 | Rorc | 0 | 0 | 0.180646022 | 2067 | 462 |
| chr3\_94448034\_94447260\_+774-Mrpl9 | chr3 | Mrpl9 | 0 | 0.182309179 | 0 | 775 | 333 |
| chr3\_94531389\_94511042\_-20347-Snx27 | chr3 | Snx27 | 0 | 0 | 0.180646022 | 20348 | 696 |
| chr3\_94531389\_94519048\_-12341-Snx27 | chr3 | Snx27 | 1.41957447 | 0.364618359 | 0.541938067 | 12342 | 606 |
| chr3\_94531389\_94524186\_-7203-Snx27 | chr3 | Snx27 | 0.202796353 | 0 | 0 | 7204 | 363 |
| chr3\_94562000\_94519048\_-42952-Snx27 | chr3 | Snx27 | 0.405592706 | 0 | 0 | 42953 | 838 |
| chr3\_94562000\_94524186\_-37814-Snx27 | chr3 | Snx27 | 0 | 0.182309179 | 0 | 37815 | 595 |
| chr3\_94562284\_94519048\_-43236-Snx27 | chr3 | Snx27 | 0 | 0 | 0.180646022 | 43237 | 904 |
| chr3\_94562284\_94561769\_-515-Snx27 | chr3 | Snx27 | 0 | 0.09115459 | 0 | 516 | 298 |
| chr3\_94856201\_94853950\_+2251-Pogz | chr3 | Pogz | 0.202796353 | 0 | 0 | 2252 | 284 |
| chr3\_94999113\_94983983\_+15130-Pi4kb | chr3 | Pi4kb | 0 | 0 | 0.180646022 | 15131 | 2043 |
| chr3\_95036745\_95032818\_-3927-Psmd4 | chr3 | Psmd4 | 0.202796353 | 0.182309179 | 0 | 3928 | 1138 |
| chr3\_95036745\_95034566\_-2179-Psmd4 | chr3 | Psmd4 | 0.202796353 | 0 | 0 | 2180 | 656 |
| chr3\_95078182\_95063655\_-14527-Pip5k1a | chr3 | Pip5k1a | 0.405592706 | 0 | 0 | 14528 | 1695 |
| chr3\_95082828\_95072403\_-10425-Pip5k1a | chr3 | Pip5k1a | 0 | 0.364618359 | 0 | 10426 | 368 |
| chr3\_95476182\_95466793\_+9389-Arnt | chr3 | Arnt | 0.202796353 | 0 | 0 | 9390 | 576 |
| chr3\_95490378\_95470177\_+20201-Arnt | chr3 | Arnt | 0.608389058 | 0 | 0 | 20202 | 1433 |
| chr3\_96042928\_96041338\_-1590-Vps45 | chr3 | Vps45 | 0.202796353 | 0 | 0.180646022 | 1591 | 417 |
| chr3\_96148355\_96147532\_-823-na | chr3 | na | 0.202796353 | 0 | 0 | 824 | 824 |
| chr3\_97690853\_96046352\_-1644501-Chd1l | chr3 | Chd1l | 0 | 0.182309179 | 0 | 1644502 | 1644502 |
| chr3\_97710444\_97706872\_-3572-Pde4dip | chr3 | Pde4dip | 0.811185411 | 0.182309179 | 0.180646022 | 3573 | 563 |
| chr3\_97719717\_97713068\_-6649-Pde4dip | chr3 | Pde4dip | 0.202796353 | 0 | 0 | 6650 | 1511 |
| chr3\_97724321\_97713068\_-11253-Pde4dip | chr3 | Pde4dip | 0 | 0.182309179 | 0 | 11254 | 1744 |
| chr3\_97754263\_97747765\_-6498-Pde4dip | chr3 | Pde4dip | 0 | 0.182309179 | 0 | 6499 | 684 |
| chr3\_97754545\_97713068\_-41477-Pde4dip | chr3 | Pde4dip | 0 | 0.182309179 | 0 | 41478 | 3301 |
| chr3\_97754545\_97741318\_-13227-Pde4dip | chr3 | Pde4dip | 0 | 0.182309179 | 0 | 13228 | 1468 |
| chr3\_97754545\_97742489\_-12056-Pde4dip | chr3 | Pde4dip | 0 | 0 | 0.180646022 | 12057 | 1340 |
| chr3\_97796808\_97792739\_-4069-Pde4dip | chr3 | Pde4dip | 0 | 0.546927538 | 0 | 4070 | 495 |
| chr3\_97824325\_97824215\_-110-Pde4dip | chr3 | Pde4dip | 0.202796353 | 0 | 0 | 111 | 111 |
| chr3\_98072922\_98070860\_+2062-Notch2 | chr3 | Notch2 | 0 | 0.182309179 | 0 | 2063 | 596 |
| chr3\_98135831\_98111550\_+24281-Notch2 | chr3 | Notch2 | 0 | 0.182309179 | 0 | 24282 | 2485 |
| chr3\_99340647\_99314744\_+25903-Tbx15 | chr3 | Tbx15 | 0.405592706 | 0 | 0 | 25904 | 503 |
| chr4\_100412140\_100407813\_+4327-Ror1 | chr4 | Ror1 | 0 | 0.182309179 | 0 | 4328 | 692 |
| chr4\_101179794\_101166543\_-13251-Jak1 | chr4 | Jak1 | 0 | 0 | 0.180646022 | 13252 | 1105 |
| chr4\_103072843\_103058142\_-14701-Wdr78 | chr4 | Wdr78 | 0 | 0 | 0.541938067 | 14702 | 14702 |
| chr4\_103140901\_103139358\_+1543-Mier1 | chr4 | Mier1 | 0 | 0.182309179 | 0 | 1544 | 357 |
| chr4\_103150628\_103139358\_+11270-Mier1 | chr4 | Mier1 | 0.405592706 | 0.182309179 | 0 | 11271 | 759 |
| chr4\_103214092\_103205106\_-8986-Slc35d1 | chr4 | Slc35d1 | 0.202796353 | 0 | 0 | 8987 | 526 |
| chr4\_103321868\_103319022\_+2846-Oma1 | chr4 | Oma1 | 0 | 0.182309179 | 0 | 2847 | 736 |
| chr4\_103331379\_103325019\_+6360-Oma1 | chr4 | Oma1 | 0.608389058 | 0.182309179 | 0 | 6361 | 486 |
| chr4\_103341833\_103319022\_+22811-Oma1 | chr4 | Oma1 | 0.202796353 | 0 | 0 | 22812 | 22812 |
| chr4\_103356629\_103353502\_+3127-Oma1 | chr4 | Oma1 | 0 | 0 | 0.361292045 | 3128 | 3128 |
| chr4\_106413674\_106370069\_+43605-Usp24 | chr4 | Usp24 | 0 | 0 | 0.180646022 | 43606 | 4332 |
| chr4\_106430591\_106409611\_+20980-Usp24 | chr4 | Usp24 | 0.608389058 | 0.911545897 | 0.180646022 | 20981 | 1852 |
| chr4\_108250873\_108237342\_-13531-Zyg11b | chr4 | Zyg11b | 0.405592706 | 0 | 0 | 13532 | 710 |
| chr4\_108272383\_108241821\_-30562-Zyg11b | chr4 | Zyg11b | 0.202796353 | 0 | 0 | 30563 | 1916 |
| chr4\_108272383\_108250495\_-21888-Zyg11b | chr4 | Zyg11b | 0 | 0 | 0.180646022 | 21889 | 1455 |
| chr4\_108272383\_108255201\_-17182-Zyg11b | chr4 | Zyg11b | 0.202796353 | 0 | 0 | 17183 | 1239 |
| chr4\_108272383\_108265818\_-6565-Zyg11b | chr4 | Zyg11b | 0.811185411 | 0.729236718 | 0.361292045 | 6566 | 921 |
| chr4\_108503035\_108486454\_+16581-Zcchc11 | chr4 | Zcchc11 | 0 | 0.182309179 | 0 | 16582 | 670 |
| chr4\_108628708\_108623451\_+5257-Cc2d1b | chr4 | Cc2d1b | 0 | 0.182309179 | 0 | 5258 | 1891 |
| chr4\_108691791\_108656927\_-34864-Zfyve9 | chr4 | Zfyve9 | 0 | 0 | 0.180646022 | 34865 | 1215 |
| chr4\_109024277\_109013510\_+10767-Nrd1 | chr4 | Nrd1 | 0 | 0.182309179 | 0 | 10768 | 845 |
| chr4\_109060984\_109058582\_+2402-na | chr4 | na | 0 | 0.182309179 | 0 | 2403 | 2403 |
| chr4\_109107949\_109083089\_-24860-Osbpl9 | chr4 | Osbpl9 | 0.405592706 | 0.729236718 | 0 | 24861 | 689 |
| chr4\_109133820\_109083089\_-50731-Osbpl9 | chr4 | Osbpl9 | 0 | 0.182309179 | 0.180646022 | 50732 | 766 |
| chr4\_109385562\_109361670\_+23892-Eps15 | chr4 | Eps15 | 0 | 0 | 0.180646022 | 23893 | 1516 |
| chr4\_11218825\_11213706\_-5119-Ints8 | chr4 | Ints8 | 0 | 0.546927538 | 0 | 5120 | 342 |
| chr4\_11248311\_11218612\_-29699-Ints8 | chr4 | Ints8 | 0 | 0 | 0.180646022 | 29700 | 2109 |
| chr4\_11248311\_11239307\_-9004-Ints8 | chr4 | Ints8 | 0 | 0 | 0.722584089 | 9005 | 712 |
| chr4\_11304390\_11285054\_-19336-Dpy19l4 | chr4 | Dpy19l4 | 0 | 0 | 0.180646022 | 19337 | 1202 |
| chr4\_115860117\_115857032\_+3085-Mknk1 | chr4 | Mknk1 | 0.202796353 | 0 | 0 | 3086 | 200 |
| chr4\_116515499\_116510522\_+4977-Ipp | chr4 | Ipp | 0 | 0.182309179 | 0 | 4978 | 774 |
| chr4\_117589157\_117552968\_+36189-Eri3 | chr4 | Eri3 | 0.202796353 | 0 | 0 | 36190 | 1838 |
| chr4\_117593162\_117564621\_+28541-Eri3 | chr4 | Eri3 | 0.202796353 | 0.182309179 | 0.180646022 | 28542 | 547 |
| chr4\_117593162\_117564627\_+28535-Eri3 | chr4 | Eri3 | 0.202796353 | 0 | 0 | 28536 | 1854 |
| chr4\_117615241\_117564621\_+50620-na | chr4 | na | 0 | 0.09115459 | 0 | 50621 | 50621 |
| chr4\_117649406\_117582600\_+66806-Eri3 | chr4 | Eri3 | 0.202796353 | 0 | 0 | 66807 | 1755 |
| chr4\_118622193\_118621361\_+832-Ebna1bp2 | chr4 | Ebna1bp2 | 0.405592706 | 0 | 0 | 833 | 297 |
| chr4\_119533809\_119533313\_-496-AA415398 | chr4 | AA415398 | 0 | 0.729236718 | 0 | 497 | 306 |
| chr4\_119585824\_119560603\_+25221-Foxj3 | chr4 | Foxj3 | 0 | 0.182309179 | 0 | 25222 | 461 |
| chr4\_119620348\_119616508\_+3840-Foxj3 | chr4 | Foxj3 | 0 | 0.182309179 | 0 | 3841 | 724 |
| chr4\_120508212\_120462013\_+46199-Scmh1 | chr4 | Scmh1 | 0 | 0.182309179 | 0 | 46200 | 1139 |
| chr4\_123399509\_123394070\_-5439-Macf1 | chr4 | Macf1 | 0 | 0 | 0.180646022 | 5440 | 1188 |
| chr4\_124746182\_124743636\_+2546-Inpp5b | chr4 | Inpp5b | 0 | 0.364618359 | 0 | 2547 | 239 |
| chr4\_124821359\_124820205\_+1154-Mtf1 | chr4 | Mtf1 | 0 | 0.182309179 | 0 | 1155 | 371 |
| chr4\_126125818\_126123716\_+2102-Stk40 | chr4 | Stk40 | 0 | 0 | 0.541938067 | 2103 | 350 |
| chr4\_126275257\_126272678\_+2579-Trappc3 | chr4 | Trappc3 | 0 | 0.182309179 | 0 | 2580 | 497 |
| chr4\_126370382\_126355006\_-15376-Ago3 | chr4 | Ago3 | 0 | 0 | 0.180646022 | 15377 | 722 |
| chr4\_126377041\_126346631\_-30410-Ago3 | chr4 | Ago3 | 0.202796353 | 0 | 0 | 30411 | 1816 |
| chr4\_126816474\_126814256\_+2218-AU040320 | chr4 | AU040320 | 0.405592706 | 0 | 0 | 2219 | 349 |
| chr4\_126915665\_126877629\_-38036-Zmym4 | chr4 | Zmym4 | 0 | 0.182309179 | 0 | 38037 | 3111 |
| chr4\_126915665\_126899932\_-15733-na | chr4 | na | 0.101398176 | 0 | 0 | 15734 | 15734 |
| chr4\_126915665\_126902543\_-13122-Zmym4 | chr4 | Zmym4 | 0 | 0 | 0.180646022 | 13123 | 1747 |
| chr4\_127100760\_127078408\_+22352-Zmym6 | chr4 | Zmym6 | 0.202796353 | 0 | 0 | 22353 | 1011 |
| chr4\_127124480\_127108548\_+15932-Zmym6 | chr4 | Zmym6 | 0 | 0.182309179 | 0 | 15933 | 15933 |
| chr4\_131897871\_131891207\_+6664-Srsf4 | chr4 | Srsf4 | 0 | 0 | 0.180646022 | 6665 | 471 |
| chr4\_132000304\_131967788\_-32516-Epb41 | chr4 | Epb41 | 0 | 0.546927538 | 0 | 32517 | 1143 |
| chr4\_132000304\_131982453\_-17851-Epb41 | chr4 | Epb41 | 0 | 0.182309179 | 0 | 17852 | 531 |
| chr4\_132071171\_132006958\_-64213-na | chr4 | na | 0 | 0 | 0.180646022 | 64214 | 64214 |
| chr4\_132377554\_131989715\_-387839-Gmeb1 | chr4 | Gmeb1 | 0 | 0 | 0.180646022 | 387840 | 387840 |
| chr4\_133077145\_133055013\_+22132-Ahdc1 | chr4 | Ahdc1 | 0.202796353 | 0 | 0 | 22133 | 5521 |
| chr4\_133185752\_133184969\_+783-Wasf2 | chr4 | Wasf2 | 0.202796353 | 0 | 0 | 784 | 289 |
| chr4\_134154396\_134148010\_-6386-Cep85 | chr4 | Cep85 | 0 | 0 | 0.361292045 | 6387 | 746 |
| chr4\_135338078\_135329373\_-8705-Srrm1 | chr4 | Srrm1 | 0 | 0 | 0.180646022 | 8706 | 588 |
| chr4\_136257986\_136253746\_+4240-Tcea3 | chr4 | Tcea3 | 0 | 0 | 0.361292045 | 4241 | 443 |
| chr4\_136264610\_136253746\_+10864-Tcea3 | chr4 | Tcea3 | 0 | 0 | 0.361292045 | 10865 | 607 |
| chr4\_136545402\_136539125\_+6277-Luzp1 | chr4 | Luzp1 | 0 | 0 | 0.180646022 | 6278 | 3420 |
| chr4\_136545402\_136540356\_+5046-Luzp1 | chr4 | Luzp1 | 0.202796353 | 0 | 0 | 5047 | 3328 |
| chr4\_136545541\_136539125\_+6416-Luzp1 | chr4 | Luzp1 | 0 | 0.182309179 | 0.180646022 | 6417 | 3559 |
| chr4\_136545541\_136540356\_+5185-Luzp1 | chr4 | Luzp1 | 0.202796353 | 0 | 0 | 5186 | 3467 |
| chr4\_136577204\_136568573\_-8631-Kdm1a | chr4 | Kdm1a | 0 | 0 | 0.180646022 | 8632 | 590 |
| chr4\_137510167\_136255150\_+1255017-na | chr4 | na | 0 | 0.09115459 | 0 | 1255018 | 1255018 |
| chr4\_137523890\_137510542\_+13348-Hspg2 | chr4 | Hspg2 | 0.506990882 | 1.367318845 | 0.722584089 | 13349 | 13349 |
| chr4\_137608182\_137604523\_+3659-Usp48 | chr4 | Usp48 | 0.405592706 | 0 | 0.180646022 | 3660 | 531 |
| chr4\_137644498\_137613682\_+30816-Usp48 | chr4 | Usp48 | 0 | 0.182309179 | 0 | 30817 | 5811 |
| chr4\_137644498\_137634898\_+9600-Usp48 | chr4 | Usp48 | 0 | 0.182309179 | 0 | 9601 | 664 |
| chr4\_137655249\_137621062\_+34187-Usp48 | chr4 | Usp48 | 0 | 0.364618359 | 0 | 34188 | 2349 |
| chr4\_138084370\_138082893\_+1477-Eif4g3 | chr4 | Eif4g3 | 0.405592706 | 0 | 0 | 1478 | 222 |
| chr4\_138084370\_138082914\_+1456-Eif4g3 | chr4 | Eif4g3 | 0 | 0.546927538 | 0.180646022 | 1457 | 201 |
| chr4\_138087565\_138045343\_+42222-Eif4g3 | chr4 | Eif4g3 | 0 | 0.273463769 | 0 | 42223 | 573 |
| chr4\_138097359\_138082893\_+14466-Eif4g3 | chr4 | Eif4g3 | 0 | 0 | 0.180646022 | 14467 | 571 |
| chr4\_138105436\_138087533\_+17903-na | chr4 | na | 0 | 0 | 0.180646022 | 17904 | 17904 |
| chr4\_138105436\_138096752\_+8684-Eif4g3 | chr4 | Eif4g3 | 0.811185411 | 0 | 0 | 8685 | 516 |
| chr4\_138126634\_138096752\_+29882-Eif4g3 | chr4 | Eif4g3 | 0 | 0 | 0.180646022 | 29883 | 1450 |
| chr4\_138126634\_138125810\_+824-Eif4g3 | chr4 | Eif4g3 | 0.202796353 | 0 | 0 | 825 | 825 |
| chr4\_138172677\_138163447\_+9230-Eif4g3 | chr4 | Eif4g3 | 0.202796353 | 0 | 0 | 9231 | 858 |
| chr4\_138188222\_138045343\_+142879-Eif4g3 | chr4 | Eif4g3 | 0.202796353 | 0 | 0 | 142880 | 142880 |
| chr4\_138241736\_138221526\_+20210-Hp1bp3 | chr4 | Hp1bp3 | 0.202796353 | 0 | 0 | 20211 | 1763 |
| chr4\_138241792\_138221526\_+20266-Hp1bp3 | chr4 | Hp1bp3 | 0.202796353 | 0 | 0 | 20267 | 1819 |
| chr4\_139367213\_139365195\_+2018-Emc1 | chr4 | Emc1 | 0 | 0.182309179 | 0 | 2019 | 632 |
| chr4\_139393419\_139388368\_+5051-Ubr4 | chr4 | Ubr4 | 0 | 0.546927538 | 0 | 5052 | 842 |
| chr4\_139402832\_139399562\_+3270-Ubr4 | chr4 | Ubr4 | 0 | 0.182309179 | 0 | 3271 | 790 |
| chr4\_141180532\_141167713\_+12819-Fbxo42 | chr4 | Fbxo42 | 0 | 0.182309179 | 0 | 12820 | 517 |
| chr4\_141522392\_141516836\_-5556-Spen | chr4 | Spen | 0 | 0.273463769 | 0 | 5557 | 804 |
| chr4\_141695510\_141692255\_-3255-Ddi2 | chr4 | Ddi2 | 0.202796353 | 0 | 0 | 3256 | 294 |
| chr4\_141698858\_141692255\_-6603-Ddi2 | chr4 | Ddi2 | 0.405592706 | 0 | 0 | 6604 | 423 |
| chr4\_141708456\_141692255\_-16201-Ddi2 | chr4 | Ddi2 | 0.202796353 | 0 | 0 | 16202 | 915 |
| chr4\_142411344\_142410457\_-887-na | chr4 | na | 0 | 0.182309179 | 0 | 888 | 888 |
| chr4\_143180991\_143170036\_-10955-Prdm2 | chr4 | Prdm2 | 0 | 0 | 0.180646022 | 10956 | 372 |
| chr4\_143180991\_143179288\_-1703-Prdm2 | chr4 | Prdm2 | 0.202796353 | 0 | 0 | 1704 | 219 |
| chr4\_143194734\_143170036\_-24698-Prdm2 | chr4 | Prdm2 | 0.202796353 | 0.182309179 | 0 | 24699 | 446 |
| chr4\_145020269\_145016735\_-3534-Vps13d | chr4 | Vps13d | 0 | 0.364618359 | 0 | 3535 | 329 |
| chr4\_145088438\_145086704\_-1734-Vps13d | chr4 | Vps13d | 0 | 0 | 0.180646022 | 1735 | 567 |
| chr4\_145100067\_145016735\_-83332-Vps13d | chr4 | Vps13d | 0.202796353 | 0 | 0 | 83333 | 4036 |
| chr4\_145100067\_145044961\_-55106-Vps13d | chr4 | Vps13d | 0.202796353 | 0 | 0 | 55107 | 3707 |
| chr4\_145100070\_145044961\_-55109-Vps13d | chr4 | Vps13d | 0.202796353 | 0 | 0.180646022 | 55110 | 3710 |
| chr4\_145105921\_145016735\_-89186-Vps13d | chr4 | Vps13d | 0.405592706 | 0 | 0 | 89187 | 4237 |
| chr4\_145156782\_145154569\_-2213-Vps13d | chr4 | Vps13d | 0.608389058 | 0.364618359 | 0.180646022 | 2214 | 2214 |
| chr4\_152020708\_152020190\_-518-Zbtb48 | chr4 | Zbtb48 | 0.506990882 | 0 | 0 | 519 | 254 |
| chr4\_152052709\_152050535\_+2174-Nol9 | chr4 | Nol9 | 0.405592706 | 0 | 0 | 2175 | 575 |
| chr4\_152237766\_152206764\_+31002-Acot7 | chr4 | Acot7 | 0 | 0 | 0.722584089 | 31003 | 569 |
| chr4\_152524368\_152518093\_+6275-Nphp4 | chr4 | Nphp4 | 0.405592706 | 0 | 0 | 6276 | 310 |
| chr4\_154152870\_154151628\_+1242-Wrap73 | chr4 | Wrap73 | 0.202796353 | 0 | 0 | 1243 | 404 |
| chr4\_155102200\_155089486\_+12714-Morn1 | chr4 | Morn1 | 0 | 0.182309179 | 0 | 12715 | 7976 |
| chr4\_155160956\_155157370\_-3586-Ski | chr4 | Ski | 0.405592706 | 0 | 0 | 3587 | 1186 |
| chr4\_155543193\_155515631\_+27562-Gnb1 | chr4 | Gnb1 | 0 | 0 | 0.180646022 | 27563 | 519 |
| chr4\_155585449\_155576993\_+8456-Nadk | chr4 | Nadk | 0.608389058 | 0 | 0 | 8457 | 614 |
| chr4\_155610636\_155609839\_+797-Slc35e2 | chr4 | Slc35e2 | 0 | 0.182309179 | 0 | 798 | 617 |
| chr4\_155612737\_155609839\_+2898-Slc35e2 | chr4 | Slc35e2 | 0 | 0 | 0.180646022 | 2899 | 866 |
| chr4\_155648404\_155625727\_+22677-Cdk11b | chr4 | Cdk11b | 0 | 0 | 0.180646022 | 22678 | 1742 |
| chr4\_155843139\_155842905\_+234-Mxra8 | chr4 | Mxra8 | 0 | 0.182309179 | 0 | 235 | 158 |
| chr4\_155855619\_155820329\_+35290-Dvl1 | chr4 | Dvl1 | 0.202796353 | 0 | 0 | 35291 | 35291 |
| chr4\_155902416\_155649012\_+253404-Dvl1 | chr4 | Dvl1 | 0 | 0.182309179 | 0 | 253405 | 253405 |
| chr4\_155902416\_155896567\_+5849-Acap3 | chr4 | Acap3 | 0 | 0.182309179 | 0.541938067 | 5850 | 1023 |
| chr4\_19650440\_19627633\_-22807-Wwp1 | chr4 | Wwp1 | 0 | 0.364618359 | 0.180646022 | 22808 | 1537 |
| chr4\_21993820\_21982386\_+11434-Faxc | chr4 | Faxc | 0.202796353 | 0 | 0 | 11435 | 640 |
| chr4\_22377077\_22375661\_+1416-Fbxl4 | chr4 | Fbxl4 | 0.405592706 | 0 | 0 | 1417 | 707 |
| chr4\_22403745\_22375661\_+28084-Fbxl4 | chr4 | Fbxl4 | 0 | 0.546927538 | 0 | 28085 | 1512 |
| chr4\_22403745\_22385907\_+17838-Fbxl4 | chr4 | Fbxl4 | 0 | 0.182309179 | 0 | 17839 | 805 |
| chr4\_22427462\_22375661\_+51801-Fbxl4 | chr4 | Fbxl4 | 0.202796353 | 0 | 0 | 51802 | 3021 |
| chr4\_22427462\_22376496\_+50966-Fbxl4 | chr4 | Fbxl4 | 0.202796353 | 0 | 0 | 50967 | 2911 |
| chr4\_32581045\_32561778\_+19267-Bach2 | chr4 | Bach2 | 0 | 0 | 0.361292045 | 19268 | 3026 |
| chr4\_32646660\_32643540\_+3120-Casp8ap2 | chr4 | Casp8ap2 | 0 | 0.182309179 | 0 | 3121 | 3121 |
| chr4\_32686424\_32683543\_+2881-Mdn1 | chr4 | Mdn1 | 0 | 0 | 0.541938067 | 2882 | 555 |
| chr4\_33325147\_33320519\_+4628-Rngtt | chr4 | Rngtt | 0 | 0 | 0.722584089 | 4629 | 487 |
| chr4\_33356196\_33320519\_+35677-Rngtt | chr4 | Rngtt | 0.202796353 | 0 | 0 | 35678 | 1152 |
| chr4\_34595236\_34579743\_-15493-Orc3 | chr4 | Orc3 | 0 | 0 | 0.180646022 | 15494 | 803 |
| chr4\_34656262\_34647786\_+8476-Rars2 | chr4 | Rars2 | 0 | 0.182309179 | 0 | 8477 | 537 |
| chr4\_34848032\_34839332\_-8700-Zfp292 | chr4 | Zfp292 | 0.202796353 | 0 | 0 | 8701 | 8701 |
| chr4\_34852406\_34839332\_-13074-Zfp292 | chr4 | Zfp292 | 0 | 0.364618359 | 0 | 13075 | 13075 |
| chr4\_3570372\_3569364\_-1008-Tmem68 | chr4 | Tmem68 | 0.202796353 | 0 | 0 | 1009 | 441 |
| chr4\_40167191\_40163719\_+3472-Aco1 | chr4 | Aco1 | 0.405592706 | 0 | 0 | 3473 | 434 |
| chr4\_40193861\_40180172\_+13689-Aco1 | chr4 | Aco1 | 0 | 0.182309179 | 0 | 13690 | 1299 |
| chr4\_41229848\_41216566\_-13282-Ubap2 | chr4 | Ubap2 | 0 | 0.182309179 | 0.361292045 | 13283 | 578 |
| chr4\_43232608\_43227925\_+4683-Unc13b | chr4 | Unc13b | 0 | 0.09115459 | 0 | 4684 | 149 |
| chr4\_43549529\_43544280\_-5249-Tln1 | chr4 | Tln1 | 0 | 0.182309179 | 0 | 5250 | 1925 |
| chr4\_45992270\_45989078\_+3192-Tdrd7 | chr4 | Tdrd7 | 0.202796353 | 0 | 0 | 3193 | 397 |
| chr4\_46029807\_46025657\_+4150-Tdrd7 | chr4 | Tdrd7 | 0.202796353 | 0 | 0 | 4151 | 664 |
| chr4\_46097078\_46092139\_+4939-Tmod1 | chr4 | Tmod1 | 0 | 0 | 0.180646022 | 4940 | 383 |
| chr4\_47396585\_47383749\_+12836-Tgfbr1 | chr4 | Tgfbr1 | 0.202796353 | 0 | 0 | 12837 | 720 |
| chr4\_48140485\_48131765\_+8720-Stx17 | chr4 | Stx17 | 0 | 0 | 0.361292045 | 8721 | 403 |
| chr4\_48167043\_48131765\_+35278-Stx17 | chr4 | Stx17 | 0 | 0.182309179 | 0 | 35279 | 742 |
| chr4\_48470072\_48456734\_-13338-Tex10 | chr4 | Tex10 | 0 | 0.182309179 | 0 | 13339 | 1985 |
| chr4\_53517681\_53481464\_+36217-Slc44a1 | chr4 | Slc44a1 | 0.405592706 | 0 | 0 | 36218 | 370 |
| chr4\_53696978\_53659513\_+37465-Fsd1l | chr4 | Fsd1l | 0 | 0.182309179 | 0 | 37466 | 1036 |
| chr4\_55014847\_55007533\_+7314-Zfp462 | chr4 | Zfp462 | 0 | 0 | 0.180646022 | 7315 | 6009 |
| chr4\_55378289\_55366777\_+11512-Rad23b | chr4 | Rad23b | 1.216778117 | 0 | 0 | 11513 | 487 |
| chr4\_55381116\_55368045\_+13071-Rad23b | chr4 | Rad23b | 0 | 0 | 0.361292045 | 13072 | 533 |
| chr4\_55381116\_55370204\_+10912-Rad23b | chr4 | Rad23b | 0 | 0.182309179 | 0 | 10913 | 453 |
| chr4\_55385601\_55378234\_+7367-Rad23b | chr4 | Rad23b | 0.608389058 | 0 | 0 | 7368 | 640 |
| chr4\_55385601\_55382480\_+3121-Rad23b | chr4 | Rad23b | 0.202796353 | 0 | 0 | 3122 | 456 |
| chr4\_56912130\_56899026\_-13104-Tmem245 | chr4 | Tmem245 | 0 | 0.182309179 | 0.180646022 | 13105 | 710 |
| chr4\_56923508\_56906215\_-17293-Tmem245 | chr4 | Tmem245 | 0 | 0.182309179 | 0 | 17294 | 572 |
| chr4\_57206304\_57204907\_-1397-Ptpn3 | chr4 | Ptpn3 | 0 | 0.729236718 | 0 | 1398 | 300 |
| chr4\_57710143\_57709451\_+692-na | chr4 | na | 0 | 0 | 0.361292045 | 693 | 693 |
| chr4\_58841605\_58832704\_-8901-AI314180 | chr4 | AI314180 | 0.202796353 | 0 | 0.180646022 | 8902 | 888 |
| chr4\_58844202\_58840675\_-3527-AI314180 | chr4 | AI314180 | 0 | 0.364618359 | 0 | 3528 | 520 |
| chr4\_58879134\_58861525\_-17609-AI314180 | chr4 | AI314180 | 0 | 0.182309179 | 0.361292045 | 17610 | 900 |
| chr4\_59494610\_59493186\_-1424-Ptbp3 | chr4 | Ptbp3 | 0 | 0.546927538 | 0 | 1425 | 286 |
| chr4\_59524476\_59514274\_-10202-na | chr4 | na | 0 | 0 | 0.090323011 | 10203 | 10203 |
| chr4\_59691338\_59686677\_+4661-E130308A19Rik | chr4 | E130308A19Rik | 0 | 0.182309179 | 0 | 4662 | 1664 |
| chr4\_62314425\_62300696\_-13729-Fkbp15 | chr4 | Fkbp15 | 0 | 0 | 0.180646022 | 13730 | 1954 |
| chr4\_62336547\_62329348\_-7199-Fkbp15 | chr4 | Fkbp15 | 2.636352587 | 1.458473435 | 1.445168179 | 7200 | 556 |
| chr4\_6440989\_6432680\_-8309-Nsmaf | chr4 | Nsmaf | 0 | 0.364618359 | 0 | 8310 | 498 |
| chr4\_72170770\_72169092\_-1678-Tle1 | chr4 | Tle1 | 0 | 0.182309179 | 0 | 1679 | 168 |
| chr4\_72170770\_72169122\_-1648-Tle1 | chr4 | Tle1 | 0.405592706 | 0 | 0 | 1649 | 138 |
| chr4\_74311750\_74298441\_+13309-Kdm4c | chr4 | Kdm4c | 0 | 0.182309179 | 0 | 13310 | 348 |
| chr4\_74315649\_74271194\_+44455-Kdm4c | chr4 | Kdm4c | 0 | 0.182309179 | 0 | 44456 | 777 |
| chr4\_74315649\_74280897\_+34752-Kdm4c | chr4 | Kdm4c | 0 | 0.546927538 | 0.180646022 | 34753 | 601 |
| chr4\_81308426\_81297287\_-11139-Mpdz | chr4 | Mpdz | 0 | 0 | 0.180646022 | 11140 | 629 |
| chr4\_81310319\_81303593\_-6726-Mpdz | chr4 | Mpdz | 0 | 0.182309179 | 0 | 6727 | 624 |
| chr4\_81335874\_81303593\_-32281-Mpdz | chr4 | Mpdz | 0.202796353 | 0 | 0 | 32282 | 1451 |
| chr4\_81386478\_81377964\_-8514-Mpdz | chr4 | Mpdz | 0 | 0.182309179 | 0 | 8515 | 1110 |
| chr4\_82383661\_82310303\_-73358-na | chr4 | na | 0 | 0 | 0.090323011 | 73359 | 73359 |
| chr4\_86217073\_86156635\_+60438-Adamtsl1 | chr4 | Adamtsl1 | 0 | 0.364618359 | 0 | 60439 | 597 |
| chr4\_86388548\_86249763\_+138785-Adamtsl1 | chr4 | Adamtsl1 | 0 | 0.364618359 | 0 | 138786 | 2932 |
| chr4\_86781711\_86774238\_+7473-Dennd4c | chr4 | Dennd4c | 0 | 0 | 0.180646022 | 7474 | 815 |
| chr4\_86781711\_86779835\_+1876-na | chr4 | na | 0 | 0.182309179 | 0 | 1877 | 1877 |
| chr4\_86829666\_86819862\_+9804-Dennd4c | chr4 | Dennd4c | 0.202796353 | 0 | 0 | 9805 | 1894 |
| chr4\_87794011\_87766440\_-27571-Mllt3 | chr4 | Mllt3 | 0 | 0.182309179 | 0 | 27572 | 27572 |
| chr4\_8806361\_8751324\_+55037-Chd7 | chr4 | Chd7 | 0 | 0.729236718 | 0 | 55038 | 2593 |
| chr4\_88129052\_88115931\_+13121-Focad | chr4 | Focad | 0 | 0.182309179 | 0 | 13122 | 353 |
| chr4\_88186082\_88174613\_+11469-Focad | chr4 | Focad | 0 | 0.182309179 | 0.090323011 | 11470 | 703 |
| chr4\_88197016\_88121270\_+75746-Focad | chr4 | Focad | 0 | 0.182309179 | 0 | 75747 | 1487 |
| chr4\_88232782\_88121270\_+111512-Focad | chr4 | Focad | 0.202796353 | 0 | 0 | 111513 | 1952 |
| chr4\_88232782\_88196759\_+36023-Focad | chr4 | Focad | 0.405592706 | 0 | 0 | 36024 | 723 |
| chr4\_88393648\_88121270\_+272378-Focad | chr4 | Focad | 0.202796353 | 0 | 0 | 272379 | 4400 |
| chr4\_94590074\_94582481\_-7593-Plaa | chr4 | Plaa | 0 | 0 | 0.180646022 | 7594 | 1268 |
| chr4\_9532065\_9474898\_-57167-Asph | chr4 | Asph | 0.405592706 | 0 | 0 | 57168 | 977 |
| chr4\_9532065\_9508627\_-23438-Asph | chr4 | Asph | 1.216778117 | 0 | 0 | 23439 | 615 |
| chr4\_9532065\_9529886\_-2179-Asph | chr4 | Asph | 0.405592706 | 0.364618359 | 0.361292045 | 2180 | 288 |
| chr4\_9604629\_9583812\_-20817-Asph | chr4 | Asph | 0 | 0.182309179 | 0 | 20818 | 405 |
| chr4\_9607871\_9508627\_-99244-Asph | chr4 | Asph | 0 | 0.182309179 | 0 | 99245 | 1268 |
| chr4\_9610938\_9484472\_-126466-Asph | chr4 | Asph | 0 | 0.09115459 | 0 | 126467 | 1500 |
| chr4\_9610938\_9508627\_-102311-Asph | chr4 | Asph | 0.304194529 | 0 | 0 | 102312 | 1364 |
| chr4\_9639347\_9635901\_-3446-Asph | chr4 | Asph | 0 | 0 | 0.361292045 | 3447 | 264 |
| chr4\_98041679\_97956374\_+85305-Nfia | chr4 | Nfia | 0 | 0.182309179 | 0 | 85306 | 516 |
| chr4\_98065446\_98063013\_+2433-Nfia | chr4 | Nfia | 0.202796353 | 0 | 0 | 2434 | 345 |
| chr4\_98688230\_98674194\_+14036-Inadl | chr4 | Inadl | 0 | 0 | 0.180646022 | 14037 | 804 |
| chr4\_99089621\_99055322\_-34299-Dock7 | chr4 | Dock7 | 0.202796353 | 0 | 0 | 34300 | 1644 |
| chr4\_99224550\_99212577\_+11973-Atg4c | chr4 | Atg4c | 0.405592706 | 0 | 0 | 11974 | 992 |
| chr4\_99228634\_99212577\_+16057-Atg4c | chr4 | Atg4c | 0.202796353 | 0.182309179 | 0 | 16058 | 1071 |
| chr4\_99235186\_99212577\_+22609-Atg4c | chr4 | Atg4c | 0 | 0.182309179 | 0.180646022 | 22610 | 1268 |
| chr4\_99258703\_99212577\_+46126-Atg4c | chr4 | Atg4c | 0 | 0 | 0.541938067 | 46127 | 1575 |
| chr4\_99753191\_99742355\_+10836-Alg6 | chr4 | Alg6 | 0 | 0.364618359 | 0 | 10837 | 897 |
| chr4\_99753191\_99744490\_+8701-Alg6 | chr4 | Alg6 | 0 | 0 | 0.541938067 | 8702 | 646 |
| chr4\_99901777\_99831390\_+70387-Efcab7 | chr4 | Efcab7 | 0 | 0.182309179 | 0 | 70388 | 70388 |
| chr4\_99964865\_99961456\_+3409-Pgm2 | chr4 | Pgm2 | 0 | 0.182309179 | 0 | 3410 | 627 |
| chr4\_99967213\_99961456\_+5757-Pgm2 | chr4 | Pgm2 | 0 | 0 | 0.180646022 | 5758 | 782 |
| chr4\_99970102\_99961456\_+8646-Pgm2 | chr4 | Pgm2 | 0.811185411 | 0 | 0.361292045 | 8647 | 898 |
| chr4\_99979000\_99961456\_+17544-Pgm2 | chr4 | Pgm2 | 0.202796353 | 0 | 0 | 17545 | 1034 |
| chr4\_99984103\_99967059\_+17044-Pgm2 | chr4 | Pgm2 | 1.013981764 | 1.093855076 | 0.722584089 | 17045 | 726 |
| chr4\_99984103\_99969987\_+14116-Pgm2 | chr4 | Pgm2 | 0 | 0.182309179 | 0 | 14117 | 571 |
| chr4\_99984103\_99978865\_+5238-Pgm2 | chr4 | Pgm2 | 0 | 0.182309179 | 0 | 5239 | 455 |
| chr5\_100408113\_100392863\_-15250-Sec31a | chr5 | Sec31a | 0 | 0.182309179 | 0 | 15251 | 1198 |
| chr5\_100537468\_100528539\_+8929-Cops4 | chr5 | Cops4 | 0 | 0.182309179 | 0 | 8930 | 732 |
| chr5\_103834459\_103825980\_+8479-Aff1 | chr5 | Aff1 | 0 | 0.182309179 | 0 | 8480 | 1246 |
| chr5\_103876289\_103870529\_-5760-Klhl8 | chr5 | Klhl8 | 0 | 0.364618359 | 0 | 5761 | 992 |
| chr5\_103876289\_103874203\_-2086-Klhl8 | chr5 | Klhl8 | 0.202796353 | 0 | 0.361292045 | 2087 | 736 |
| chr5\_103886290\_103885907\_-383-Klhl8 | chr5 | Klhl8 | 1.41957447 | 2.005400973 | 0.180646022 | 384 | 384 |
| chr5\_103890781\_103885907\_-4874-Klhl8 | chr5 | Klhl8 | 0.608389058 | 0 | 0 | 4875 | 451 |
| chr5\_104489414\_104466883\_+22531-Pkd2 | chr5 | Pkd2 | 0 | 0 | 0.180646022 | 22532 | 1303 |
| chr5\_105896603\_105886187\_+10416-Zfp326 | chr5 | Zfp326 | 0 | 0 | 0.180646022 | 10417 | 865 |
| chr5\_106638635\_106619540\_-19095-Zfp644 | chr5 | Zfp644 | 0.405592706 | 0.364618359 | 0.361292045 | 19096 | 3855 |
| chr5\_106666845\_106618071\_-48774-na | chr5 | na | 0.101398176 | 0 | 0 | 48775 | 48775 |
| chr5\_106666845\_106619540\_-47305-na | chr5 | na | 0 | 0 | 0.270969033 | 47306 | 47306 |
| chr5\_106666845\_106634831\_-32014-na | chr5 | na | 0.202796353 | 0 | 0 | 32015 | 32015 |
| chr5\_106669840\_106666785\_-3055-Zfp644 | chr5 | Zfp644 | 0 | 0.182309179 | 0 | 3056 | 3056 |
| chr5\_106679743\_106634831\_-44912-Zfp644 | chr5 | Zfp644 | 0.202796353 | 0 | 0.180646022 | 44913 | 3757 |
| chr5\_106682013\_106634831\_-47182-Zfp644 | chr5 | Zfp644 | 0 | 0.182309179 | 0 | 47183 | 47183 |
| chr5\_106690877\_106634831\_-56046-Zfp644 | chr5 | Zfp644 | 0.202796353 | 0 | 0 | 56047 | 3905 |
| chr5\_107266350\_107266194\_-156-Tgfbr3 | chr5 | Tgfbr3 | 0 | 0.182309179 | 0 | 157 | 157 |
| chr5\_107813606\_107788199\_-25407-Evi5 | chr5 | Evi5 | 0 | 0 | 0.180646022 | 25408 | 973 |
| chr5\_108088089\_108073307\_+14782-Mtf2 | chr5 | Mtf2 | 0.202796353 | 0 | 0 | 14783 | 775 |
| chr5\_108094248\_108073307\_+20941-Mtf2 | chr5 | Mtf2 | 0 | 0 | 0.180646022 | 20942 | 1064 |
| chr5\_110153280\_110151527\_+1753-Chfr | chr5 | Chfr | 0.202796353 | 0 | 0 | 1754 | 1105 |
| chr5\_110267265\_110265512\_-1753-Pgam5 | chr5 | Pgam5 | 0 | 0 | 0.180646022 | 1754 | 528 |
| chr5\_110742060\_110719087\_-22973-Ep400 | chr5 | Ep400 | 0 | 0 | 0.180646022 | 22974 | 1963 |
| chr5\_110756766\_110719087\_-37679-Ep400 | chr5 | Ep400 | 0.811185411 | 0 | 0 | 37680 | 3444 |
| chr5\_110756766\_110741970\_-14796-Ep400 | chr5 | Ep400 | 0 | 0 | 0.541938067 | 14797 | 1572 |
| chr5\_110756766\_110741970\_-14796-na | chr5 | na | 0 | 0.09115459 | 0 | 14797 | 14797 |
| chr5\_111085169\_111085022\_+147-Ttc28 | chr5 | Ttc28 | 0.202796353 | 0 | 0 | 148 | 148 |
| chr5\_111235641\_111223110\_+12531-Ttc28 | chr5 | Ttc28 | 0.202796353 | 0 | 0 | 12532 | 2491 |
| chr5\_112309887\_112303900\_+5987-Tpst2 | chr5 | Tpst2 | 0 | 0.182309179 | 0 | 5988 | 1183 |
| chr5\_112717031\_112715381\_-1650-Myo18b | chr5 | Myo18b | 0.202796353 | 0 | 0 | 1651 | 183 |
| chr5\_112766578\_112692096\_-74482-Myo18b | chr5 | Myo18b | 0.202796353 | 0 | 0 | 74483 | 74483 |
| chr5\_112785667\_112782585\_-3082-Myo18b | chr5 | Myo18b | 0 | 0.182309179 | 0 | 3083 | 216 |
| chr5\_112803308\_112782585\_-20723-Myo18b | chr5 | Myo18b | 0.405592706 | 0.182309179 | 0 | 20724 | 1050 |
| chr5\_112828086\_112809662\_-18424-Myo18b | chr5 | Myo18b | 0.202796353 | 0 | 0 | 18425 | 539 |
| chr5\_112846444\_112827977\_-18467-Myo18b | chr5 | Myo18b | 1.41957447 | 1.093855076 | 0.541938067 | 18468 | 1364 |
| chr5\_112846444\_112830160\_-16284-Myo18b | chr5 | Myo18b | 2.027963528 | 1.458473435 | 2.890336357 | 16285 | 1254 |
| chr5\_112868392\_112782585\_-85807-Myo18b | chr5 | Myo18b | 0.101398176 | 0 | 0 | 85808 | 3495 |
| chr5\_112868392\_112858402\_-9990-Myo18b | chr5 | Myo18b | 0 | 0 | 0.180646022 | 9991 | 652 |
| chr5\_112879578\_112757455\_-122123-Myo18b | chr5 | Myo18b | 0.405592706 | 0 | 0 | 122124 | 6397 |
| chr5\_112879578\_112871421\_-8157-Myo18b | chr5 | Myo18b | 0 | 0.182309179 | 0 | 8158 | 2110 |
| chr5\_113193907\_113175205\_-18702-2900026A02Rik | chr5 | 2900026A02Rik | 0.202796353 | 0 | 0 | 18703 | 4630 |
| chr5\_114166140\_114165509\_+631-Acacb | chr5 | Acacb | 0.202796353 | 0 | 0 | 632 | 632 |
| chr5\_114202475\_114201537\_+938-Acacb | chr5 | Acacb | 0.202796353 | 0 | 0 | 939 | 939 |
| chr5\_114204822\_114201764\_+3058-Acacb | chr5 | Acacb | 0 | 0 | 0.180646022 | 3059 | 3059 |
| chr5\_114715901\_114711253\_+4648-Tchp | chr5 | Tchp | 0 | 0 | 0.180646022 | 4649 | 480 |
| chr5\_114769750\_114764347\_-5403-Git2 | chr5 | Git2 | 0 | 0.182309179 | 0 | 5404 | 571 |
| chr5\_115173224\_115166868\_-6356-Cabp1 | chr5 | Cabp1 | 0 | 0.364618359 | 0 | 6357 | 6357 |
| chr5\_115247286\_115244021\_-3265-Rnf10 | chr5 | Rnf10 | 0 | 0 | 0.180646022 | 3266 | 477 |
| chr5\_115480525\_115479602\_-923-Sirt4 | chr5 | Sirt4 | 0.202796353 | 0.364618359 | 0.180646022 | 924 | 536 |
| chr5\_115599266\_115594993\_+4273-Gcn1l1 | chr5 | Gcn1l1 | 0 | 0.182309179 | 0 | 4274 | 975 |
| chr5\_117914442\_117900471\_+13971-Nos1 | chr5 | Nos1 | 0 | 0 | 0.180646022 | 13972 | 1149 |
| chr5\_117936612\_117919396\_+17216-Nos1 | chr5 | Nos1 | 0.202796353 | 0 | 0 | 17217 | 704 |
| chr5\_117947568\_117945816\_+1752-Nos1 | chr5 | Nos1 | 0.202796353 | 0 | 0 | 1753 | 271 |
| chr5\_118118357\_118113612\_-4745-na | chr5 | na | 0 | 0.09115459 | 0 | 4746 | 4746 |
| chr5\_118127115\_118126808\_-307-na | chr5 | na | 0 | 0.182309179 | 0 | 308 | 308 |
| chr5\_118680971\_118661475\_+19496-Med13l | chr5 | Med13l | 0.202796353 | 0 | 0 | 19497 | 19497 |
| chr5\_121143154\_121132255\_-10899-Ptpn11 | chr5 | Ptpn11 | 0 | 0 | 0.180646022 | 10900 | 2248 |
| chr5\_121168043\_121149103\_-18940-Ptpn11 | chr5 | Ptpn11 | 0 | 0.182309179 | 0 | 18941 | 1087 |
| chr5\_121266405\_121258699\_+7706-Gm15800 | chr5 | Gm15800 | 0.202796353 | 0 | 0 | 7707 | 640 |
| chr5\_121281944\_121277675\_+4269-Gm15800 | chr5 | Gm15800 | 0 | 0 | 0.180646022 | 4270 | 414 |
| chr5\_121421403\_121420463\_+940-Naa25 | chr5 | Naa25 | 0.202796353 | 0 | 0 | 941 | 283 |
| chr5\_121797785\_121785759\_+12026-Atxn2 | chr5 | Atxn2 | 0 | 0 | 0.361292045 | 12027 | 768 |
| chr5\_121797791\_121749079\_+48712-Atxn2 | chr5 | Atxn2 | 0 | 0.182309179 | 0 | 48713 | 2143 |
| chr5\_121797791\_121785759\_+12032-Atxn2 | chr5 | Atxn2 | 0.608389058 | 0 | 0 | 12033 | 774 |
| chr5\_121924915\_121898277\_-26638-Cux2 | chr5 | Cux2 | 0.202796353 | 0 | 0 | 26639 | 238 |
| chr5\_122363634\_122362634\_-1000-na | chr5 | na | 0 | 0.182309179 | 0 | 1001 | 1001 |
| chr5\_122560745\_122551060\_-9685-Ift81 | chr5 | Ift81 | 0.202796353 | 0 | 0 | 9686 | 435 |
| chr5\_122818004\_122800451\_-17553-Anapc5 | chr5 | Anapc5 | 0.202796353 | 0.364618359 | 0.722584089 | 17554 | 898 |
| chr5\_122818004\_122814549\_-3455-Anapc5 | chr5 | Anapc5 | 0 | 0.364618359 | 1.083876134 | 3456 | 251 |
| chr5\_122987806\_122961410\_-26396-Kdm2b | chr5 | Kdm2b | 0.202796353 | 0 | 0.361292045 | 26397 | 450 |
| chr5\_123099953\_123085936\_+14017-Tmem120b | chr5 | Tmem120b | 0 | 0.729236718 | 0 | 14018 | 284 |
| chr5\_123262154\_123253685\_+8469-Wdr66 | chr5 | Wdr66 | 0 | 0 | 0.361292045 | 8470 | 8470 |
| chr5\_123302837\_123253685\_+49152-Wdr66 | chr5 | Wdr66 | 0 | 0 | 0.180646022 | 49153 | 49153 |
| chr5\_123615335\_123590793\_-24542-Clip1 | chr5 | Clip1 | 0.202796353 | 0 | 0 | 24543 | 2666 |
| chr5\_123617822\_123617336\_-486-Clip1 | chr5 | Clip1 | 0 | 0.182309179 | 0 | 487 | 382 |
| chr5\_123631169\_123590793\_-40376-Clip1 | chr5 | Clip1 | 0.202796353 | 1.458473435 | 1.625814201 | 40377 | 4409 |
| chr5\_123631169\_123603599\_-27570-Clip1 | chr5 | Clip1 | 0.405592706 | 0.182309179 | 0 | 27571 | 4356 |
| chr5\_123631169\_123617336\_-13833-Clip1 | chr5 | Clip1 | 0.608389058 | 0 | 0 | 13834 | 1743 |
| chr5\_123631169\_123621796\_-9373-Clip1 | chr5 | Clip1 | 0 | 0 | 0.180646022 | 9374 | 1361 |
| chr5\_123642616\_123617336\_-25280-Clip1 | chr5 | Clip1 | 0.202796353 | 0 | 0 | 25281 | 2244 |
| chr5\_124143647\_124140524\_-3123-Pitpnm2 | chr5 | Pitpnm2 | 0.202796353 | 0 | 0 | 3124 | 565 |
| chr5\_124398509\_124391922\_-6587-Sbno1 | chr5 | Sbno1 | 0 | 0 | 0.180646022 | 6588 | 921 |
| chr5\_124405729\_124376098\_-29631-Sbno1 | chr5 | Sbno1 | 0 | 0.182309179 | 0 | 29632 | 3288 |
| chr5\_124410379\_124410070\_-309-Sbno1 | chr5 | Sbno1 | 0 | 0 | 0.541938067 | 310 | 310 |
| chr5\_124413289\_124407091\_-6198-Sbno1 | chr5 | Sbno1 | 0 | 0.364618359 | 0 | 6199 | 616 |
| chr5\_124414527\_124376098\_-38429-Sbno1 | chr5 | Sbno1 | 0.202796353 | 0.546927538 | 0.361292045 | 38430 | 4033 |
| chr5\_124712359\_124645945\_+66414-Atp6v0a2 | chr5 | Atp6v0a2 | 0 | 0 | 0.361292045 | 66415 | 458 |
| chr5\_124718005\_124645945\_+72060-Atp6v0a2 | chr5 | Atp6v0a2 | 0 | 0.182309179 | 0.180646022 | 72061 | 1324 |
| chr5\_125515130\_125503183\_+11947-Aacs | chr5 | Aacs | 0 | 0 | 0.180646022 | 11948 | 1311 |
| chr5\_125623352\_125622461\_+891-Tmem132b | chr5 | Tmem132b | 0.405592706 | 0 | 0 | 892 | 892 |
| chr5\_125638328\_125622461\_+15867-Tmem132b | chr5 | Tmem132b | 0 | 0.182309179 | 0 | 15868 | 1039 |
| chr5\_129748033\_129739472\_+8561-na | chr5 | na | 0 | 0 | 0.090323011 | 8562 | 8562 |
| chr5\_129748033\_129744705\_+3328-Gbas | chr5 | Gbas | 0 | 0.364618359 | 0 | 3329 | 339 |
| chr5\_129757252\_129753226\_+4026-Gbas | chr5 | Gbas | 0 | 0 | 0.361292045 | 4027 | 423 |
| chr5\_129757252\_129753226\_+4026-na | chr5 | na | 0 | 0.182309179 | 0 | 4027 | 4027 |
| chr5\_129847086\_129739472\_+107614-Cct6a | chr5 | Cct6a | 0.202796353 | 0 | 0 | 107615 | 107615 |
| chr5\_129867025\_129865917\_-1108-Phkg1 | chr5 | Phkg1 | 0 | 0 | 0.180646022 | 1109 | 409 |
| chr5\_129998553\_129997780\_-773-Gusb | chr5 | Gusb | 0 | 0 | 0.361292045 | 774 | 470 |
| chr5\_130232040\_130229449\_+2591-Tmem248 | chr5 | Tmem248 | 0.202796353 | 0.182309179 | 0 | 2592 | 464 |
| chr5\_134171976\_134163624\_-8352-Wbscr16 | chr5 | Wbscr16 | 0.202796353 | 0 | 0 | 8353 | 653 |
| chr5\_134246611\_134243507\_-3104-Gtf2i | chr5 | Gtf2i | 0 | 0 | 0.361292045 | 3105 | 501 |
| chr5\_134256008\_134243507\_-12501-Gtf2i | chr5 | Gtf2i | 0 | 0.182309179 | 0 | 12502 | 1134 |
| chr5\_134274595\_134260567\_-14028-Gtf2i | chr5 | Gtf2i | 0 | 0.182309179 | 0 | 14029 | 615 |
| chr5\_134287043\_134265737\_-21306-Gtf2i | chr5 | Gtf2i | 0 | 0 | 0.541938067 | 21307 | 750 |
| chr5\_134287043\_134282787\_-4256-Gtf2i | chr5 | Gtf2i | 0 | 0.182309179 | 0 | 4257 | 312 |
| chr5\_134295613\_134274539\_-21074-Gtf2i | chr5 | Gtf2i | 0.202796353 | 0 | 0.361292045 | 21075 | 885 |
| chr5\_134306731\_134274539\_-32192-na | chr5 | na | 0 | 0 | 0.180646022 | 32193 | 32193 |
| chr5\_134395800\_134389131\_-6669-Gtf2ird1 | chr5 | Gtf2ird1 | 0 | 0.182309179 | 0 | 6670 | 438 |
| chr5\_135124017\_135121506\_+2511-Mlxipl | chr5 | Mlxipl | 6.692279643 | 5.83389374 | 5.961318737 | 2512 | 501 |
| chr5\_135124017\_135123650\_+367-Mlxipl | chr5 | Mlxipl | 0.202796353 | 0 | 0 | 368 | 283 |
| chr5\_135128697\_135121506\_+7191-Mlxipl | chr5 | Mlxipl | 0 | 0.273463769 | 0 | 7192 | 686 |
| chr5\_135223218\_135216590\_+6628-Baz1b | chr5 | Baz1b | 0.202796353 | 0 | 0.180646022 | 6629 | 1978 |
| chr5\_135226612\_135209043\_+17569-Baz1b | chr5 | Baz1b | 0.405592706 | 0 | 0 | 17570 | 2530 |
| chr5\_135226612\_135210741\_+15871-Baz1b | chr5 | Baz1b | 0 | 0.182309179 | 0 | 15872 | 2408 |
| chr5\_135238066\_135198171\_+39895-Baz1b | chr5 | Baz1b | 0.202796353 | 0 | 0 | 39896 | 3504 |
| chr5\_135384166\_135376022\_-8144-Pom121 | chr5 | Pom121 | 0.405592706 | 0 | 0 | 8145 | 8145 |
| chr5\_135451635\_135440022\_-11613-Hip1 | chr5 | Hip1 | 0.202796353 | 0 | 0 | 11614 | 478 |
| chr5\_135455145\_135444735\_-10410-Hip1 | chr5 | Hip1 | 0.202796353 | 0 | 0 | 10411 | 419 |
| chr5\_135857547\_135855785\_-1762-na | chr5 | na | 0.202796353 | 0 | 0 | 1763 | 1763 |
| chr5\_135911651\_135909074\_-2577-na | chr5 | na | 0.405592706 | 0 | 0 | 2578 | 2578 |
| chr5\_136095608\_136089353\_+6255-Rasa4 | chr5 | Rasa4 | 0.405592706 | 0 | 0 | 6256 | 445 |
| chr5\_136311560\_136304723\_-6837-Cux1 | chr5 | Cux1 | 0.405592706 | 0 | 0 | 6838 | 1227 |
| chr5\_136340137\_136304723\_-35414-Cux1 | chr5 | Cux1 | 0 | 0 | 0.180646022 | 35415 | 2519 |
| chr5\_136392393\_136360002\_-32391-na | chr5 | na | 0 | 0.09115459 | 0 | 32392 | 32392 |
| chr5\_137035609\_137035170\_+439-na | chr5 | na | 0.202796353 | 0 | 0 | 440 | 440 |
| chr5\_139184719\_139181417\_+3302-Dnaaf5 | chr5 | Dnaaf5 | 0 | 0 | 0.180646022 | 3303 | 349 |
| chr5\_142172603\_142161775\_+10828-Sdk1 | chr5 | Sdk1 | 0 | 0 | 0.180646022 | 10829 | 487 |
| chr5\_142507088\_142503913\_-3175-Radil | chr5 | Radil | 0 | 0.182309179 | 0 | 3176 | 668 |
| chr5\_143087592\_143068317\_-19275-Rnf216 | chr5 | Rnf216 | 0 | 0.182309179 | 0 | 19276 | 911 |
| chr5\_143098505\_143075727\_-22778-Rnf216 | chr5 | Rnf216 | 0 | 0.182309179 | 0.180646022 | 22779 | 1857 |
| chr5\_143098505\_143089743\_-8762-Rnf216 | chr5 | Rnf216 | 0 | 0.182309179 | 0 | 8763 | 1145 |
| chr5\_143265133\_143262793\_-2340-Zfp316 | chr5 | Zfp316 | 0.202796353 | 0 | 0 | 2341 | 850 |
| chr5\_143484352\_143478414\_+5938-Daglb | chr5 | Daglb | 0.202796353 | 0 | 0 | 5939 | 378 |
| chr5\_143886961\_143871863\_+15098-Eif2ak1 | chr5 | Eif2ak1 | 0 | 0 | 0.180646022 | 15099 | 1107 |
| chr5\_143931122\_143922016\_+9106-Pms2 | chr5 | Pms2 | 0 | 0 | 0.180646022 | 9107 | 1671 |
| chr5\_143942028\_143922016\_+20012-Pms2 | chr5 | Pms2 | 0 | 0.182309179 | 0 | 20013 | 2030 |
| chr5\_143942028\_143928942\_+13086-Pms2 | chr5 | Pms2 | 0 | 0 | 0.180646022 | 13087 | 768 |
| chr5\_143993259\_143987199\_-6060-Ccz1 | chr5 | Ccz1 | 0 | 0.182309179 | 0 | 6061 | 6061 |
| chr5\_144166419\_144143526\_+22893-Lmtk2 | chr5 | Lmtk2 | 0 | 0 | 0.361292045 | 22894 | 622 |
| chr5\_144176477\_144143526\_+32951-Lmtk2 | chr5 | Lmtk2 | 0.405592706 | 0 | 0 | 32952 | 3641 |
| chr5\_144176477\_144164606\_+11871-Lmtk2 | chr5 | Lmtk2 | 0 | 0 | 0.361292045 | 11872 | 3226 |
| chr5\_144902578\_144894474\_-8104-Smurf1 | chr5 | Smurf1 | 0 | 0 | 0.180646022 | 8105 | 751 |
| chr5\_147467097\_147453252\_+13845-Pan3 | chr5 | Pan3 | 0 | 0 | 0.361292045 | 13846 | 300 |
| chr5\_147488258\_147450653\_+37605-Pan3 | chr5 | Pan3 | 0 | 0.364618359 | 0 | 37606 | 570 |
| chr5\_147531307\_147519505\_+11802-Pan3 | chr5 | Pan3 | 0.202796353 | 0.546927538 | 0.361292045 | 11803 | 1049 |
| chr5\_148921412\_148888879\_-32533-Katnal1 | chr5 | Katnal1 | 0 | 0 | 0.180646022 | 32534 | 1155 |
| chr5\_149739601\_149726754\_+12847-B3glct | chr5 | B3glct | 0 | 0.729236718 | 0 | 12848 | 503 |
| chr5\_150378980\_150358799\_+20181-Fry | chr5 | Fry | 0.202796353 | 0 | 0 | 20182 | 766 |
| chr5\_150395867\_150380798\_+15069-Fry | chr5 | Fry | 0.202796353 | 0 | 0 | 15070 | 1345 |
| chr5\_150405421\_150380798\_+24623-Fry | chr5 | Fry | 0.202796353 | 0 | 0 | 24624 | 2367 |
| chr5\_150437332\_150433517\_+3815-Fry | chr5 | Fry | 0.405592706 | 0.182309179 | 0 | 3816 | 915 |
| chr5\_150471610\_150466244\_+5366-Fry | chr5 | Fry | 0 | 0.364618359 | 0 | 5367 | 717 |
| chr5\_150471610\_150469677\_+1933-Fry | chr5 | Fry | 0.202796353 | 0 | 0 | 1934 | 357 |
| chr5\_150560823\_150550832\_+9991-Brca2 | chr5 | Brca2 | 0 | 0 | 0.180646022 | 9992 | 1815 |
| chr5\_150567768\_150547941\_+19827-Brca2 | chr5 | Brca2 | 0.202796353 | 0 | 0 | 19828 | 2636 |
| chr5\_150608440\_150604177\_-4263-N4bp2l2 | chr5 | N4bp2l2 | 1.216778117 | 1.640782614 | 1.806460223 | 4264 | 1812 |
| chr5\_150643315\_150604177\_-39138-N4bp2l2 | chr5 | N4bp2l2 | 0.202796353 | 0 | 0.361292045 | 39139 | 1959 |
| chr5\_150783142\_150728894\_+54248-Pds5b | chr5 | Pds5b | 0.202796353 | 0 | 0 | 54249 | 2307 |
| chr5\_16267475\_16212876\_+54599-Cacna2d1 | chr5 | Cacna2d1 | 0 | 0 | 0.180646022 | 54600 | 483 |
| chr5\_16322595\_16299929\_+22666-Cacna2d1 | chr5 | Cacna2d1 | 0 | 0.182309179 | 0 | 22667 | 768 |
| chr5\_20774275\_20764214\_-10061-Phtf2 | chr5 | Phtf2 | 0 | 0 | 0.180646022 | 10062 | 744 |
| chr5\_20782491\_20765758\_-16733-Phtf2 | chr5 | Phtf2 | 0.202796353 | 0 | 0 | 16734 | 996 |
| chr5\_20794481\_20789629\_-4852-Phtf2 | chr5 | Phtf2 | 0 | 0.546927538 | 0.180646022 | 4853 | 343 |
| chr5\_20920162\_20919525\_-637-Rsbn1l | chr5 | Rsbn1l | 0.405592706 | 0 | 0 | 638 | 638 |
| chr5\_23450336\_23450152\_+184-Kmt2e | chr5 | Kmt2e | 0.405592706 | 0 | 0 | 185 | 185 |
| chr5\_23464932\_23450152\_+14780-Kmt2e | chr5 | Kmt2e | 0 | 0.182309179 | 0 | 14781 | 530 |
| chr5\_23547067\_23507058\_-40009-Srpk2 | chr5 | Srpk2 | 0 | 0 | 0.180646022 | 40010 | 2321 |
| chr5\_23576385\_23546980\_-29405-Srpk2 | chr5 | Srpk2 | 0 | 0.546927538 | 0 | 29406 | 29406 |
| chr5\_23811034\_23800595\_+10439-Rint1 | chr5 | Rint1 | 0 | 0 | 0.361292045 | 10440 | 1198 |
| chr5\_23991837\_23979488\_-12349-Fam126a | chr5 | Fam126a | 0 | 0.182309179 | 0 | 12350 | 940 |
| chr5\_24141293\_24126822\_+14471-Klhl7 | chr5 | Klhl7 | 0 | 0 | 0.180646022 | 14472 | 816 |
| chr5\_24483433\_24476378\_+7055-Agap3 | chr5 | Agap3 | 0 | 0.364618359 | 0 | 7056 | 2191 |
| chr5\_25281400\_25275900\_-5500-Kmt2c | chr5 | Kmt2c | 0 | 0 | 1.083876134 | 5501 | 360 |
| chr5\_25285183\_25281661\_-3522-Kmt2c | chr5 | Kmt2c | 0.202796353 | 0 | 0 | 3523 | 1397 |
| chr5\_25285183\_25281673\_-3510-Kmt2c | chr5 | Kmt2c | 0 | 0 | 0.180646022 | 3511 | 1385 |
| chr5\_25287845\_25281232\_-6613-Kmt2c | chr5 | Kmt2c | 0 | 0.546927538 | 0 | 6614 | 1814 |
| chr5\_25338581\_25298870\_-39711-Kmt2c | chr5 | Kmt2c | 0 | 0.182309179 | 0 | 39712 | 7413 |
| chr5\_25353408\_25347361\_-6047-Kmt2c | chr5 | Kmt2c | 0.202796353 | 0.364618359 | 0.180646022 | 6048 | 638 |
| chr5\_25366196\_25338413\_-27783-Kmt2c | chr5 | Kmt2c | 0.202796353 | 0 | 0 | 27784 | 1729 |
| chr5\_25366196\_25347361\_-18835-Kmt2c | chr5 | Kmt2c | 0 | 0 | 0.180646022 | 18836 | 1429 |
| chr5\_25395551\_25372766\_-22785-Kmt2c | chr5 | Kmt2c | 0 | 0 | 0.361292045 | 22786 | 1668 |
| chr5\_25812027\_25798446\_+13581-Actr3b | chr5 | Actr3b | 0.202796353 | 0.364618359 | 0 | 13582 | 292 |
| chr5\_25825215\_25809785\_+15430-Actr3b | chr5 | Actr3b | 0 | 0.182309179 | 0 | 15431 | 440 |
| chr5\_25832478\_25829526\_+2952-na | chr5 | na | 0 | 0.182309179 | 0 | 2953 | 2953 |
| chr5\_27788777\_27772004\_-16773-Paxip1 | chr5 | Paxip1 | 0 | 0 | 0.180646022 | 16774 | 985 |
| chr5\_28342514\_28329382\_+13132-Rbm33 | chr5 | Rbm33 | 0.202796353 | 0 | 0 | 13133 | 13133 |
| chr5\_28342514\_28331111\_+11403-Rbm33 | chr5 | Rbm33 | 0 | 0.364618359 | 0 | 11404 | 638 |
| chr5\_28362234\_28358274\_+3960-Rbm33 | chr5 | Rbm33 | 0 | 0 | 0.180646022 | 3961 | 498 |
| chr5\_28394670\_28331111\_+63559-Rbm33 | chr5 | Rbm33 | 0 | 0.182309179 | 0 | 63560 | 3116 |
| chr5\_28394670\_28358274\_+36396-Rbm33 | chr5 | Rbm33 | 0 | 0 | 0.541938067 | 36397 | 2306 |
| chr5\_29323905\_29287391\_-36514-Lmbr1 | chr5 | Lmbr1 | 0 | 0.182309179 | 0 | 36515 | 438 |
| chr5\_29346906\_29287391\_-59515-Lmbr1 | chr5 | Lmbr1 | 0.202796353 | 0 | 0 | 59516 | 578 |
| chr5\_29346906\_29346145\_-761-Lmbr1 | chr5 | Lmbr1 | 0 | 0.182309179 | 0 | 762 | 762 |
| chr5\_29365206\_29287391\_-77815-Lmbr1 | chr5 | Lmbr1 | 0.202796353 | 0 | 0 | 77816 | 977 |
| chr5\_29365206\_29323802\_-41404-Lmbr1 | chr5 | Lmbr1 | 0 | 0.182309179 | 0 | 41405 | 643 |
| chr5\_30145368\_30134058\_-11310-Hadha | chr5 | Hadha | 0 | 0.182309179 | 0 | 11311 | 738 |
| chr5\_31673445\_31659907\_-13538-Rbks | chr5 | Rbks | 0.202796353 | 0 | 0 | 13539 | 425 |
| chr5\_31831159\_31766644\_+64515-Bre | chr5 | Bre | 0.202796353 | 0 | 0 | 64516 | 64516 |
| chr5\_32153959\_32146825\_+7134-Fosl2 | chr5 | Fosl2 | 0.202796353 | 0 | 0 | 7135 | 1649 |
| chr5\_33267037\_33259138\_-7899-Ctbp1 | chr5 | Ctbp1 | 0 | 0 | 0.180646022 | 7900 | 507 |
| chr5\_33269634\_33259138\_-10496-Ctbp1 | chr5 | Ctbp1 | 0 | 0 | 0.180646022 | 10497 | 700 |
| chr5\_33614834\_33607464\_-7370-Fam53a | chr5 | Fam53a | 0.202796353 | 0.364618359 | 0 | 7371 | 1051 |
| chr5\_33614834\_33610432\_-4402-Fam53a | chr5 | Fam53a | 0 | 0 | 0.180646022 | 4403 | 287 |
| chr5\_34440590\_34419998\_+20592-Fam193a | chr5 | Fam193a | 0.405592706 | 0.364618359 | 0 | 20593 | 1268 |
| chr5\_34444913\_34410581\_+34332-Fam193a | chr5 | Fam193a | 0 | 0 | 0.180646022 | 34333 | 2097 |
| chr5\_34444913\_34431132\_+13781-Fam193a | chr5 | Fam193a | 0.202796353 | 0 | 0 | 13782 | 1293 |
| chr5\_34444913\_34436451\_+8462-Fam193a | chr5 | Fam193a | 0 | 0.182309179 | 0 | 8463 | 1168 |
| chr5\_34466447\_34431132\_+35315-Fam193a | chr5 | Fam193a | 0 | 0.182309179 | 0.180646022 | 35316 | 3355 |
| chr5\_34475807\_34463974\_+11833-Fam193a | chr5 | Fam193a | 0 | 0.364618359 | 0 | 11834 | 1187 |
| chr5\_34614360\_34605828\_+8532-Add1 | chr5 | Add1 | 0 | 0 | 0.180646022 | 8533 | 803 |
| chr5\_34628513\_34619350\_+9163-Add1 | chr5 | Add1 | 0 | 0 | 0.180646022 | 9164 | 535 |
| chr5\_34731570\_34730005\_+1565-Grk4 | chr5 | Grk4 | 0.202796353 | 0 | 0 | 1566 | 128 |
| chr5\_34886600\_34878803\_+7797-Htt | chr5 | Htt | 0 | 0.182309179 | 0 | 7798 | 896 |
| chr5\_3577344\_3575623\_+1721-1700109H08Rik | chr5 | 1700109H08Rik | 0 | 0 | 0.361292045 | 1722 | 261 |
| chr5\_35852644\_35852432\_-212-na | chr5 | na | 0.101398176 | 0 | 0 | 213 | 213 |
| chr5\_3615207\_3603232\_+11975-Pex1 | chr5 | Pex1 | 0 | 0 | 0.361292045 | 11976 | 1677 |
| chr5\_3618913\_3603232\_+15681-Pex1 | chr5 | Pex1 | 0.202796353 | 0 | 0 | 15682 | 1774 |
| chr5\_36514119\_36505025\_-9094-Tbc1d14 | chr5 | Tbc1d14 | 0 | 0.182309179 | 0 | 9095 | 487 |
| chr5\_36572037\_36571296\_-741-Tbc1d14 | chr5 | Tbc1d14 | 0.202796353 | 0.729236718 | 0.361292045 | 742 | 742 |
| chr5\_36577772\_36571296\_-6476-Tbc1d14 | chr5 | Tbc1d14 | 0 | 0 | 0.090323011 | 6477 | 6477 |
| chr5\_4044070\_4038529\_+5541-Akap9 | chr5 | Akap9 | 0 | 0.182309179 | 0 | 5542 | 435 |
| chr5\_4046941\_4028374\_+18567-Akap9 | chr5 | Akap9 | 0 | 0.182309179 | 0.180646022 | 18568 | 2427 |
| chr5\_4072700\_4067740\_+4960-Akap9 | chr5 | Akap9 | 0.202796353 | 0.364618359 | 0 | 4961 | 703 |
| chr5\_4072700\_4067745\_+4955-Akap9 | chr5 | Akap9 | 0.202796353 | 0 | 0 | 4956 | 698 |
| chr5\_43191404\_43165919\_-25485-Gm7854 | chr5 | Gm7854 | 0 | 0.364618359 | 0 | 25486 | 479 |
| chr5\_50013464\_49990125\_-23339-Adgra3 | chr5 | Adgra3 | 0.202796353 | 0 | 0 | 23340 | 1204 |
| chr5\_51548691\_51546267\_-2424-Ppargc1a | chr5 | Ppargc1a | 0 | 0 | 0.270969033 | 2425 | 2425 |
| chr5\_51548691\_51548512\_-179-Ppargc1a | chr5 | Ppargc1a | 0 | 0.364618359 | 0 | 180 | 180 |
| chr5\_5249228\_5227164\_-22064-Cdk14 | chr5 | Cdk14 | 0 | 0 | 0.722584089 | 22065 | 341 |
| chr5\_52819265\_52804379\_+14886-Zcchc4 | chr5 | Zcchc4 | 0 | 0.182309179 | 0 | 14887 | 805 |
| chr5\_53174869\_53121750\_-53119-Sel1l3 | chr5 | Sel1l3 | 0 | 0.182309179 | 0 | 53120 | 1798 |
| chr5\_53188082\_53145435\_-42647-Sel1l3 | chr5 | Sel1l3 | 0 | 0 | 0.180646022 | 42648 | 1343 |
| chr5\_53188082\_53170357\_-17725-Sel1l3 | chr5 | Sel1l3 | 1.216778117 | 0.182309179 | 0.722584089 | 17726 | 831 |
| chr5\_53188082\_53181722\_-6360-Sel1l3 | chr5 | Sel1l3 | 0.202796353 | 0.546927538 | 0 | 6361 | 424 |
| chr5\_53200471\_53170357\_-30114-Sel1l3 | chr5 | Sel1l3 | 0.202796353 | 0 | 0 | 30115 | 1402 |
| chr5\_53200471\_53184764\_-15707-Sel1l3 | chr5 | Sel1l3 | 0.202796353 | 0 | 0 | 15708 | 936 |
| chr5\_53200471\_53199901\_-570-Sel1l3 | chr5 | Sel1l3 | 0.608389058 | 0.546927538 | 1.264522156 | 571 | 571 |
| chr5\_54111110\_54102575\_+8535-Stim2 | chr5 | Stim2 | 0 | 0.182309179 | 0 | 8536 | 1116 |
| chr5\_5489595\_5450608\_-38987-1700015F17Rik | chr5 | 1700015F17Rik | 0 | 0.364618359 | 0 | 38988 | 38988 |
| chr5\_63898730\_63876450\_+22280-0610040J01Rik | chr5 | 0610040J01Rik | 0.202796353 | 0 | 0 | 22281 | 1022 |
| chr5\_64294295\_64260353\_+33942-Tbc1d1 | chr5 | Tbc1d1 | 0 | 0.182309179 | 0 | 33943 | 33943 |
| chr5\_65418608\_65416825\_-1783-Ugdh | chr5 | Ugdh | 0 | 0.182309179 | 0.180646022 | 1784 | 468 |
| chr5\_65803567\_65790018\_+13549-N4bp2 | chr5 | N4bp2 | 0 | 0 | 0.180646022 | 13550 | 1591 |
| chr5\_65814870\_65788053\_+26817-N4bp2 | chr5 | N4bp2 | 0 | 0 | 0.180646022 | 26818 | 4473 |
| chr5\_66392335\_66362718\_-29617-Apbb2 | chr5 | Apbb2 | 0 | 0.182309179 | 0 | 29618 | 485 |
| chr5\_66400281\_66362718\_-37563-Apbb2 | chr5 | Apbb2 | 0 | 0.364618359 | 0 | 37564 | 691 |
| chr5\_66986537\_66983837\_+2700-Limch1 | chr5 | Limch1 | 1.013981764 | 2.734637691 | 1.264522156 | 2701 | 2701 |
| chr5\_67776198\_67702980\_-73218-Atp8a1 | chr5 | Atp8a1 | 0 | 0.546927538 | 0 | 73219 | 1627 |
| chr5\_67776198\_67762516\_-13682-Atp8a1 | chr5 | Atp8a1 | 1.013981764 | 0 | 0 | 13683 | 682 |
| chr5\_67814723\_67805657\_-9066-Atp8a1 | chr5 | Atp8a1 | 0.202796353 | 0.182309179 | 0 | 9067 | 360 |
| chr5\_69560515\_69558185\_+2330-Guf1 | chr5 | Guf1 | 0 | 0.364618359 | 0 | 2331 | 504 |
| chr5\_71642326\_71623855\_-18471-Gabra4 | chr5 | Gabra4 | 0 | 0 | 0.180646022 | 18472 | 929 |
| chr5\_73195113\_73188360\_-6753-Fryl | chr5 | Fryl | 0.202796353 | 0 | 0 | 6754 | 6754 |
| chr5\_74547175\_74545412\_+1763-Fip1l1 | chr5 | Fip1l1 | 0 | 0 | 0.361292045 | 1764 | 373 |
| chr5\_74572585\_74536801\_+35784-Fip1l1 | chr5 | Fip1l1 | 0 | 0.182309179 | 0 | 35785 | 1089 |
| chr5\_74685872\_74685396\_-476-Lnx1 | chr5 | Lnx1 | 0.202796353 | 0 | 0 | 477 | 477 |
| chr5\_76204816\_76199345\_+5471-Tmem165 | chr5 | Tmem165 | 0 | 0.182309179 | 0 | 5472 | 582 |
| chr5\_76274043\_76262675\_-11368-Clock | chr5 | Clock | 0.101398176 | 0 | 0 | 11369 | 476 |
| chr5\_76546131\_76542051\_+4080-Exoc1 | chr5 | Exoc1 | 0 | 0 | 0.180646022 | 4081 | 4081 |
| chr5\_76559825\_76549452\_+10373-Exoc1 | chr5 | Exoc1 | 0.405592706 | 0 | 0 | 10374 | 573 |
| chr5\_76996689\_76990273\_+6416-Srp72 | chr5 | Srp72 | 0 | 0 | 0.180646022 | 6417 | 592 |
| chr5\_8160799\_8149208\_-11591-Adam22 | chr5 | Adam22 | 0.202796353 | 0 | 0 | 11592 | 280 |
| chr5\_8907399\_8899568\_+7831-Abcb4 | chr5 | Abcb4 | 0 | 0.182309179 | 0 | 7832 | 401 |
| chr5\_89084718\_88934749\_+149969-Slc4a4 | chr5 | Slc4a4 | 0 | 0.182309179 | 0 | 149970 | 904 |
| chr5\_8910743\_8909102\_+1641-Abcb4 | chr5 | Abcb4 | 0 | 0.729236718 | 0.180646022 | 1642 | 297 |
| chr5\_89149433\_89084642\_+64791-Slc4a4 | chr5 | Slc4a4 | 0.202796353 | 0 | 0 | 64792 | 901 |
| chr5\_89179844\_89046213\_+133631-Slc4a4 | chr5 | Slc4a4 | 0.202796353 | 0 | 0 | 133632 | 1712 |
| chr5\_90298134\_90250375\_-47759-Ankrd17 | chr5 | Ankrd17 | 0 | 0.182309179 | 0 | 47760 | 4475 |
| chr5\_90304065\_90278243\_-25822-Ankrd17 | chr5 | Ankrd17 | 0 | 0.182309179 | 0 | 25823 | 2841 |
| chr5\_90304065\_90298540\_-5525-Ankrd17 | chr5 | Ankrd17 | 0.405592706 | 0 | 0 | 5526 | 459 |
| chr5\_96098313\_96091584\_-6729-Cnot6l | chr5 | Cnot6l | 0 | 0.182309179 | 0 | 6730 | 382 |
| chr5\_96134132\_96106216\_-27916-Cnot6l | chr5 | Cnot6l | 0 | 0 | 0.180646022 | 27917 | 485 |
| chr5\_97980034\_97960610\_-19424-Antxr2 | chr5 | Antxr2 | 0 | 0 | 0.361292045 | 19425 | 405 |
| chr6\_100637122\_100630883\_-6239-Shq1 | chr6 | Shq1 | 0 | 0.182309179 | 0 | 6240 | 333 |
| chr6\_100655371\_100630883\_-24488-Shq1 | chr6 | Shq1 | 0.608389058 | 0 | 0 | 24489 | 574 |
| chr6\_101252578\_101249147\_-3431-na | chr6 | na | 0 | 0 | 0.090323011 | 3432 | 3432 |
| chr6\_101252578\_101251920\_-658-na | chr6 | na | 0 | 0.182309179 | 0 | 659 | 659 |
| chr6\_101354501\_101277532\_-76969-Pdzrn3 | chr6 | Pdzrn3 | 0.202796353 | 0 | 0 | 76970 | 76970 |
| chr6\_113398884\_113393103\_+5781-Ttll3 | chr6 | Ttll3 | 0.202796353 | 0 | 0 | 5782 | 603 |
| chr6\_114890806\_114862201\_-28605-Vgll4 | chr6 | Vgll4 | 0 | 0.182309179 | 0 | 28606 | 746 |
| chr6\_115614685\_113615776\_+1998909-Atg7 | chr6 | Atg7 | 0 | 0.182309179 | 0 | 1998910 | 1998910 |
| chr6\_115635080\_115631215\_-3865-Raf1 | chr6 | Raf1 | 0 | 0.364618359 | 0 | 3866 | 514 |
| chr6\_115644642\_115631215\_-13427-Raf1 | chr6 | Raf1 | 0 | 0.182309179 | 0 | 13428 | 860 |
| chr6\_115644642\_115632897\_-11745-Raf1 | chr6 | Raf1 | 0.202796353 | 0 | 0.180646022 | 11746 | 706 |
| chr6\_115669424\_115637599\_-31825-na | chr6 | na | 0 | 0.09115459 | 0.090323011 | 31826 | 31826 |
| chr6\_115877551\_115875244\_+2307-Ift122 | chr6 | Ift122 | 0 | 0.364618359 | 0 | 2308 | 156 |
| chr6\_116107516\_116042871\_-64645-Tmcc1 | chr6 | Tmcc1 | 0.202796353 | 0 | 0 | 64646 | 1140 |
| chr6\_116134457\_116097914\_-36543-Tmcc1 | chr6 | Tmcc1 | 0.202796353 | 0 | 0 | 36544 | 36544 |
| chr6\_116138250\_116133767\_-4483-Tmcc1 | chr6 | Tmcc1 | 0.811185411 | 0 | 0 | 4484 | 747 |
| chr6\_118398155\_118388756\_-9399-Bms1 | chr6 | Bms1 | 0.202796353 | 0 | 0.180646022 | 9400 | 1290 |
| chr6\_119279526\_119277062\_+2464-Cacna2d4 | chr6 | Cacna2d4 | 0.202796353 | 0 | 0 | 2465 | 2465 |
| chr6\_119282250\_119267807\_+14443-Cacna2d4 | chr6 | Cacna2d4 | 0.405592706 | 0 | 0 | 14444 | 1097 |
| chr6\_11962789\_11959929\_+2860-Phf14 | chr6 | Phf14 | 0.405592706 | 0 | 0 | 2861 | 2861 |
| chr6\_119761311\_119694571\_-66740-Erc1 | chr6 | Erc1 | 0 | 0.182309179 | 0 | 66741 | 1223 |
| chr6\_119825209\_119694571\_-130638-Erc1 | chr6 | Erc1 | 0 | 0.182309179 | 0 | 130639 | 2947 |
| chr6\_119825209\_119713680\_-111529-Erc1 | chr6 | Erc1 | 0 | 0 | 0.180646022 | 111530 | 2786 |
| chr6\_119825209\_119749838\_-75371-Erc1 | chr6 | Erc1 | 0 | 0.182309179 | 0 | 75372 | 2312 |
| chr6\_119825209\_119796907\_-28302-Erc1 | chr6 | Erc1 | 0.202796353 | 0.729236718 | 0 | 28303 | 1241 |
| chr6\_119825819\_119713680\_-112139-Erc1 | chr6 | Erc1 | 0.405592706 | 0 | 0 | 112140 | 2925 |
| chr6\_119825819\_119722173\_-103646-Erc1 | chr6 | Erc1 | 0.202796353 | 0 | 0 | 103647 | 2793 |
| chr6\_119825819\_119824386\_-1433-Erc1 | chr6 | Erc1 | 0 | 0.911545897 | 0.180646022 | 1434 | 963 |
| chr6\_119840161\_119743288\_-96873-Erc1 | chr6 | Erc1 | 0.202796353 | 0 | 0 | 96874 | 2595 |
| chr6\_119914237\_119911048\_+3189-Rad52 | chr6 | Rad52 | 0.304194529 | 0.273463769 | 0.361292045 | 3190 | 537 |
| chr6\_119916042\_119911048\_+4994-Rad52 | chr6 | Rad52 | 0.101398176 | 0 | 0 | 4995 | 732 |
| chr6\_11997194\_11986342\_+10852-Phf14 | chr6 | Phf14 | 0.405592706 | 0 | 0 | 10853 | 1026 |
| chr6\_119992560\_119990092\_-2468-Wnk1 | chr6 | Wnk1 | 0 | 0.182309179 | 0 | 2469 | 379 |
| chr6\_12047944\_11961550\_+86394-Phf14 | chr6 | Phf14 | 0 | 0 | 0.180646022 | 86395 | 1593 |
| chr6\_122833876\_122828157\_+5719-Foxj2 | chr6 | Foxj2 | 0.202796353 | 0 | 0 | 5720 | 828 |
| chr6\_124636166\_124542188\_-93978-C1s2 | chr6 | C1s2 | 0 | 0.182309179 | 0 | 93979 | 93979 |
| chr6\_124636166\_124542193\_-93973-C1s2 | chr6 | C1s2 | 1.825167175 | 1.093855076 | 1.264522156 | 93974 | 93974 |
| chr6\_127478129\_127468032\_+10097-Parp11 | chr6 | Parp11 | 0 | 0 | 0.541938067 | 10098 | 651 |
| chr6\_127491890\_127468032\_+23858-Parp11 | chr6 | Parp11 | 0 | 0.182309179 | 0 | 23859 | 1275 |
| chr6\_129184313\_129180633\_+3680-Clec2d | chr6 | Clec2d | 0 | 0.364618359 | 0 | 3681 | 420 |
| chr6\_131376180\_131367765\_-8415-Ybx3 | chr6 | Ybx3 | 0.202796353 | 0 | 0.361292045 | 8416 | 570 |
| chr6\_131384566\_131379358\_-5208-Ybx3 | chr6 | Ybx3 | 0 | 0.364618359 | 0 | 5209 | 311 |
| chr6\_134066465\_134062064\_+4401-na | chr6 | na | 0 | 0 | 0.180646022 | 4402 | 4402 |
| chr6\_134542045\_134541652\_-393-Lrp6 | chr6 | Lrp6 | 0.202796353 | 0.364618359 | 0 | 394 | 394 |
| chr6\_136566785\_136559764\_+7021-Atf7ip | chr6 | Atf7ip | 0.405592706 | 0.182309179 | 0.180646022 | 7022 | 2047 |
| chr6\_136571538\_136559764\_+11774-Atf7ip | chr6 | Atf7ip | 0 | 0 | 0.361292045 | 11775 | 2113 |
| chr6\_136582466\_136559764\_+22702-Atf7ip | chr6 | Atf7ip | 0 | 0 | 0.361292045 | 22703 | 2276 |
| chr6\_140528633\_140524865\_+3768-Plekha5 | chr6 | Plekha5 | 0 | 0.364618359 | 0 | 3769 | 383 |
| chr6\_140556070\_140543720\_+12350-Plekha5 | chr6 | Plekha5 | 0.405592706 | 0.546927538 | 0.361292045 | 12351 | 1135 |
| chr6\_140568881\_140543720\_+25161-na | chr6 | na | 0 | 0.546927538 | 0.270969033 | 25162 | 25162 |
| chr6\_140570186\_140543720\_+26466-Plekha5 | chr6 | Plekha5 | 0 | 0 | 0.180646022 | 26467 | 1450 |
| chr6\_140580115\_140543720\_+36395-Plekha5 | chr6 | Plekha5 | 0 | 0 | 0.180646022 | 36396 | 36396 |
| chr6\_140820889\_140764278\_+56611-Gm30215 | chr6 | Gm30215 | 0 | 0 | 0.180646022 | 56612 | 56612 |
| chr6\_142644355\_142628423\_-15932-Abcc9 | chr6 | Abcc9 | 0 | 0 | 0.180646022 | 15933 | 672 |
| chr6\_142687441\_142639192\_-48249-Abcc9 | chr6 | Abcc9 | 0 | 0.364618359 | 0 | 48250 | 2187 |
| chr6\_142689130\_142652527\_-36603-Abcc9 | chr6 | Abcc9 | 0.202796353 | 0 | 0 | 36604 | 1783 |
| chr6\_148415783\_148411038\_-4745-Tmtc1 | chr6 | Tmtc1 | 0.202796353 | 0 | 0 | 4746 | 455 |
| chr6\_148425984\_148411038\_-14946-Tmtc1 | chr6 | Tmtc1 | 1.622370823 | 0.364618359 | 0.180646022 | 14947 | 633 |
| chr6\_17492437\_17487797\_+4640-Met | chr6 | Met | 0 | 0.364618359 | 0 | 4641 | 1260 |
| chr6\_17513541\_17491227\_+22314-Met | chr6 | Met | 0 | 0 | 0.180646022 | 22315 | 1403 |
| chr6\_17527249\_17487797\_+39452-Met | chr6 | Met | 0 | 0.182309179 | 0 | 39453 | 1761 |
| chr6\_17563719\_17553239\_+10480-Met | chr6 | Met | 0 | 0 | 0.180646022 | 10481 | 770 |
| chr6\_17904969\_17852258\_+52711-St7 | chr6 | St7 | 0 | 0 | 0.361292045 | 52712 | 441 |
| chr6\_21969435\_21952129\_+17306-Ing3 | chr6 | Ing3 | 0 | 0 | 0.180646022 | 17307 | 614 |
| chr6\_22017086\_22016903\_+183-Cped1 | chr6 | Cped1 | 0.405592706 | 0 | 0 | 184 | 184 |
| chr6\_22088857\_22016903\_+71954-Cped1 | chr6 | Cped1 | 0.202796353 | 0 | 0 | 71955 | 669 |
| chr6\_22145687\_22119462\_+26225-Cped1 | chr6 | Cped1 | 0.202796353 | 0 | 0 | 26226 | 1125 |
| chr6\_22145687\_22132229\_+13458-Cped1 | chr6 | Cped1 | 4.258723409 | 4.740038664 | 1.264522156 | 13459 | 636 |
| chr6\_22145687\_22143944\_+1743-Cped1 | chr6 | Cped1 | 0 | 0.182309179 | 0 | 1744 | 356 |
| chr6\_22222540\_22132229\_+90311-Cped1 | chr6 | Cped1 | 0 | 0.182309179 | 0.361292045 | 90312 | 891 |
| chr6\_22237742\_22233445\_+4297-Cped1 | chr6 | Cped1 | 0 | 0.182309179 | 0 | 4298 | 558 |
| chr6\_24634658\_24624236\_-10422-Wasl | chr6 | Wasl | 0 | 0.182309179 | 0 | 10423 | 574 |
| chr6\_28545598\_28522983\_+22615-Snd1 | chr6 | Snd1 | 0 | 0.182309179 | 0 | 22616 | 22616 |
| chr6\_28545598\_28526053\_+19545-Snd1 | chr6 | Snd1 | 0 | 0 | 0.180646022 | 19546 | 724 |
| chr6\_29139626\_29131267\_-8359-Rbm28 | chr6 | Rbm28 | 0 | 0.182309179 | 0 | 8360 | 659 |
| chr6\_29451793\_29450814\_+979-Flnc | chr6 | Flnc | 0.202796353 | 0 | 0 | 980 | 471 |
| chr6\_29589229\_29586038\_-3191-Tnpo3 | chr6 | Tnpo3 | 0 | 0.364618359 | 0.180646022 | 3192 | 432 |
| chr6\_29599698\_29578463\_-21235-Tnpo3 | chr6 | Tnpo3 | 0.202796353 | 0 | 0 | 21236 | 1050 |
| chr6\_29953453\_29939037\_+14416-Strip2 | chr6 | Strip2 | 0 | 0 | 0.180646022 | 14417 | 400 |
| chr6\_30102309\_30095340\_+6969-Nrf1 | chr6 | Nrf1 | 0.202796353 | 0 | 0 | 6970 | 383 |
| chr6\_30126359\_30095340\_+31019-Nrf1 | chr6 | Nrf1 | 0 | 0 | 0.361292045 | 31020 | 1125 |
| chr6\_30126359\_30115013\_+11346-Nrf1 | chr6 | Nrf1 | 0 | 0 | 0.903230112 | 11347 | 742 |
| chr6\_31093595\_31080865\_-12730-Lncpint | chr6 | Lncpint | 0 | 1.093855076 | 1.083876134 | 12731 | 12731 |
| chr6\_31101586\_31093363\_-8223-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0 | 8224 | 8224 |
| chr6\_31181149\_31087492\_-93657-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0.541938067 | 93658 | 93658 |
| chr6\_31181149\_31093363\_-87786-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0 | 87787 | 87787 |
| chr6\_31181149\_31166476\_-14673-Lncpint | chr6 | Lncpint | 0.405592706 | 0 | 0 | 14674 | 291 |
| chr6\_31183553\_31166476\_-17077-Lncpint | chr6 | Lncpint | 0.202796353 | 0 | 0 | 17078 | 17078 |
| chr6\_31197851\_31093363\_-104488-Lncpint | chr6 | Lncpint | 0 | 0 | 0.180646022 | 104489 | 104489 |
| chr6\_31197851\_31111034\_-86817-Lncpint | chr6 | Lncpint | 0 | 0 | 0.180646022 | 86818 | 86818 |
| chr6\_31197851\_31121432\_-76419-na | chr6 | na | 0 | 0 | 0.180646022 | 76420 | 76420 |
| chr6\_31197851\_31139729\_-58122-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0 | 58123 | 58123 |
| chr6\_31197851\_31163894\_-33957-Lncpint | chr6 | Lncpint | 0.202796353 | 0 | 0 | 33958 | 33958 |
| chr6\_31197851\_31163894\_-33957-na | chr6 | na | 0 | 0.09115459 | 0 | 33958 | 33958 |
| chr6\_31197851\_31166476\_-31375-Lncpint | chr6 | Lncpint | 0.202796353 | 0.364618359 | 0 | 31376 | 360 |
| chr6\_31197851\_31181022\_-16829-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0.090323011 | 16830 | 200 |
| chr6\_31207438\_31166476\_-40962-Lncpint | chr6 | Lncpint | 0.202796353 | 0 | 0 | 40963 | 40963 |
| chr6\_31219135\_31166476\_-52659-Lncpint | chr6 | Lncpint | 0 | 0.182309179 | 0 | 52660 | 52660 |
| chr6\_31337339\_31285003\_+52336-2210408F21Rik | chr6 | 2210408F21Rik | 0.608389058 | 0 | 0 | 52337 | 426 |
| chr6\_31374760\_31328289\_+46471-2210408F21Rik | chr6 | 2210408F21Rik | 0.202796353 | 0 | 0 | 46472 | 46472 |
| chr6\_31459067\_31449496\_+9571-Mkln1 | chr6 | Mkln1 | 0 | 0.364618359 | 0.361292045 | 9572 | 257 |
| chr6\_31478056\_31468131\_+9925-Mkln1 | chr6 | Mkln1 | 0 | 0.182309179 | 0 | 9926 | 565 |
| chr6\_33049424\_32968201\_-81223-Chchd3 | chr6 | Chchd3 | 0 | 0 | 0.180646022 | 81224 | 288 |
| chr6\_34891537\_34886066\_-5471-Wdr91 | chr6 | Wdr91 | 0 | 0.182309179 | 0 | 5472 | 637 |
| chr6\_35080226\_35051062\_-29164-Cnot4 | chr6 | Cnot4 | 0 | 0.182309179 | 0 | 29165 | 1719 |
| chr6\_35080226\_35064889\_-15337-Cnot4 | chr6 | Cnot4 | 0 | 0 | 0.722584089 | 15338 | 913 |
| chr6\_35080226\_35064898\_-15328-Cnot4 | chr6 | Cnot4 | 0 | 0.182309179 | 0.361292045 | 15329 | 904 |
| chr6\_35080226\_35077981\_-2245-Cnot4 | chr6 | Cnot4 | 0.202796353 | 0 | 0.180646022 | 2246 | 464 |
| chr6\_35192038\_35186433\_+5605-Nup205 | chr6 | Nup205 | 0 | 0.364618359 | 0 | 5606 | 871 |
| chr6\_35192038\_35189855\_+2183-Nup205 | chr6 | Nup205 | 0 | 0 | 0.180646022 | 2184 | 394 |
| chr6\_3555466\_3545510\_+9956-Vps50 | chr6 | Vps50 | 0 | 0 | 0.180646022 | 9957 | 419 |
| chr6\_3562358\_3522683\_+39675-Vps50 | chr6 | Vps50 | 0 | 0.729236718 | 0 | 39676 | 912 |
| chr6\_3571108\_3545510\_+25598-Vps50 | chr6 | Vps50 | 0 | 0 | 0.180646022 | 25599 | 913 |
| chr6\_3571108\_3565516\_+5592-Vps50 | chr6 | Vps50 | 0 | 0.182309179 | 0 | 5593 | 403 |
| chr6\_3578915\_3522683\_+56232-Vps50 | chr6 | Vps50 | 0.202796353 | 0 | 0 | 56233 | 1437 |
| chr6\_3578915\_3545510\_+33405-Vps50 | chr6 | Vps50 | 0 | 0.729236718 | 0 | 33406 | 1035 |
| chr6\_3578915\_3551013\_+27902-Vps50 | chr6 | Vps50 | 0.202796353 | 0 | 0 | 27903 | 902 |
| chr6\_3594901\_3588006\_+6895-Vps50 | chr6 | Vps50 | 0 | 0.182309179 | 0 | 6896 | 486 |
| chr6\_37931500\_37927526\_+3974-Trim24 | chr6 | Trim24 | 0 | 0 | 0.090323011 | 3975 | 262 |
| chr6\_38464043\_38440455\_+23588-Ubn2 | chr6 | Ubn2 | 0.405592706 | 0.182309179 | 0 | 23589 | 927 |
| chr6\_38470222\_38440455\_+29767-Ubn2 | chr6 | Ubn2 | 0.608389058 | 0.182309179 | 0.180646022 | 29768 | 998 |
| chr6\_38470222\_38452870\_+17352-Ubn2 | chr6 | Ubn2 | 0.202796353 | 0 | 0 | 17353 | 905 |
| chr6\_38470222\_38461475\_+8747-Ubn2 | chr6 | Ubn2 | 0.608389058 | 0.911545897 | 2.167752268 | 8748 | 803 |
| chr6\_38470222\_38462963\_+7259-Ubn2 | chr6 | Ubn2 | 0 | 0.182309179 | 0 | 7260 | 665 |
| chr6\_38484125\_38461475\_+22650-Ubn2 | chr6 | Ubn2 | 0.405592706 | 0 | 0 | 22651 | 1361 |
| chr6\_38487150\_38461475\_+25675-Ubn2 | chr6 | Ubn2 | 0.608389058 | 0.364618359 | 0 | 25676 | 1404 |
| chr6\_38491931\_38440455\_+51476-Ubn2 | chr6 | Ubn2 | 0.405592706 | 2.187710153 | 1.264522156 | 51477 | 3147 |
| chr6\_38491931\_38461475\_+30456-Ubn2 | chr6 | Ubn2 | 0 | 0.911545897 | 0 | 30457 | 2952 |
| chr6\_38502342\_38436411\_+65931-na | chr6 | na | 0 | 0 | 0.090323011 | 65932 | 65932 |
| chr6\_38502408\_38436411\_+65997-Ubn2 | chr6 | Ubn2 | 0 | 0 | 0.180646022 | 65998 | 65998 |
| chr6\_38502408\_38440455\_+61953-Ubn2 | chr6 | Ubn2 | 1.825167175 | 2.552328511 | 4.335504536 | 61954 | 3640 |
| chr6\_38502408\_38461475\_+40933-Ubn2 | chr6 | Ubn2 | 0 | 0 | 0.361292045 | 40934 | 3445 |
| chr6\_38589286\_38568847\_+20439-Luc7l2 | chr6 | Luc7l2 | 0 | 0 | 0.541938067 | 20440 | 2015 |
| chr6\_38747997\_38743076\_-4921-Hipk2 | chr6 | Hipk2 | 0 | 0 | 0.180646022 | 4922 | 516 |
| chr6\_38822269\_38818230\_-4039-Hipk2 | chr6 | Hipk2 | 0 | 0 | 0.361292045 | 4040 | 4040 |
| chr6\_39338814\_39336366\_-2448-Slc37a3 | chr6 | Slc37a3 | 0.405592706 | 0 | 0 | 2449 | 1130 |
| chr6\_39349518\_39347289\_-2229-Slc37a3 | chr6 | Slc37a3 | 0 | 0.182309179 | 0 | 2230 | 321 |
| chr6\_42311250\_42290587\_+20663-Clcn1 | chr6 | Clcn1 | 0.202796353 | 0 | 0 | 20664 | 2120 |
| chr6\_42357985\_42350257\_+7728-Zyx | chr6 | Zyx | 0.405592706 | 0 | 0 | 7729 | 1736 |
| chr6\_4719496\_4707074\_-12422-Sgce | chr6 | Sgce | 0.202796353 | 0 | 0.361292045 | 12423 | 553 |
| chr6\_47577667\_47551732\_-25935-Ezh2 | chr6 | Ezh2 | 0.202796353 | 0 | 0.180646022 | 25936 | 899 |
| chr6\_50348138\_50344874\_-3264-Osbpl3 | chr6 | Osbpl3 | 0.202796353 | 0 | 0 | 3265 | 646 |
| chr6\_50434755\_50434499\_-256-na | chr6 | na | 0 | 0 | 0.180646022 | 257 | 257 |
| chr6\_52630349\_52609145\_-21204-Hibadh | chr6 | Hibadh | 0 | 0.364618359 | 0 | 21205 | 21205 |
| chr6\_5489211\_5486678\_-2533-Pdk4 | chr6 | Pdk4 | 0 | 0 | 0.180646022 | 2534 | 401 |
| chr6\_56860801\_56849638\_+11163-Fkbp9 | chr6 | Fkbp9 | 0.202796353 | 0 | 0 | 11164 | 818 |
| chr6\_58759198\_58720459\_-38739-Gm38822 | chr6 | Gm38822 | 0 | 0 | 0.090323011 | 38740 | 38740 |
| chr6\_58759198\_58749465\_-9733-Gm38822 | chr6 | Gm38822 | 0 | 0 | 0.180646022 | 9734 | 9734 |
| chr6\_58890234\_58876489\_+13745-Herc3 | chr6 | Herc3 | 0 | 0 | 0.180646022 | 13746 | 874 |
| chr6\_65058132\_65052620\_+5512-Smarcad1 | chr6 | Smarcad1 | 0 | 0.182309179 | 0 | 5513 | 411 |
| chr6\_65092594\_65058066\_+34528-Smarcad1 | chr6 | Smarcad1 | 0.202796353 | 0 | 0 | 34529 | 1300 |
| chr6\_65859478\_65855949\_+3529-Prdm5 | chr6 | Prdm5 | 0 | 0.546927538 | 0 | 3530 | 565 |
| chr6\_65886178\_65869181\_+16997-Prdm5 | chr6 | Prdm5 | 0 | 0 | 0.180646022 | 16998 | 592 |
| chr6\_65901859\_65855949\_+45910-Prdm5 | chr6 | Prdm5 | 0.405592706 | 0 | 0 | 45911 | 1323 |
| chr6\_65901859\_65881049\_+20810-Prdm5 | chr6 | Prdm5 | 0 | 0.182309179 | 0 | 20811 | 435 |
| chr6\_67064718\_67043759\_+20959-E230016M11Rik | chr6 | E230016M11Rik | 0 | 0 | 0.180646022 | 20960 | 20960 |
| chr6\_67116767\_67077248\_+39519-E230016M11Rik | chr6 | E230016M11Rik | 0 | 0.182309179 | 0 | 39520 | 39520 |
| chr6\_71239726\_71237357\_-2369-Smyd1 | chr6 | Smyd1 | 0 | 0.182309179 | 0.180646022 | 2370 | 522 |
| chr6\_71510220\_71505734\_+4486-Rnf103 | chr6 | Rnf103 | 0.202796353 | 0.182309179 | 0 | 4487 | 1651 |
| chr6\_71510220\_71508869\_+1351-na | chr6 | na | 0 | 0.182309179 | 0 | 1352 | 1352 |
| chr6\_71607606\_71599317\_-8289-Kdm3a | chr6 | Kdm3a | 0.202796353 | 0 | 0 | 8290 | 993 |
| chr6\_71871558\_71868580\_+2978-Immt | chr6 | Immt | 0 | 0.182309179 | 0 | 2979 | 356 |
| chr6\_73271122\_73256171\_+14951-Suclg1 | chr6 | Suclg1 | 0.405592706 | 0 | 0 | 14952 | 728 |
| chr6\_83404824\_83385985\_-18839-na | chr6 | na | 0 | 0.09115459 | 0 | 18840 | 18840 |
| chr6\_83404824\_83402667\_-2157-Tet3 | chr6 | Tet3 | 0 | 0.364618359 | 0 | 2158 | 2158 |
| chr6\_83930165\_83928653\_+1512-Zfp638 | chr6 | Zfp638 | 0 | 0.182309179 | 0.541938067 | 1513 | 1513 |
| chr6\_83946363\_83928653\_+17710-Zfp638 | chr6 | Zfp638 | 0 | 0 | 0.180646022 | 17711 | 2344 |
| chr6\_83947941\_83942834\_+5107-Zfp638 | chr6 | Zfp638 | 0.202796353 | 0 | 0 | 5108 | 853 |
| chr6\_83953387\_83928653\_+24734-Zfp638 | chr6 | Zfp638 | 0 | 0 | 0.361292045 | 24735 | 2579 |
| chr6\_83954761\_83942834\_+11927-Zfp638 | chr6 | Zfp638 | 0 | 0.182309179 | 0 | 11928 | 1016 |
| chr6\_83969239\_83942834\_+26405-Zfp638 | chr6 | Zfp638 | 0 | 0 | 0.361292045 | 26406 | 1837 |
| chr6\_84108202\_84063321\_+44881-Dysf | chr6 | Dysf | 0.202796353 | 0 | 0 | 44882 | 2268 |
| chr6\_84152409\_84129471\_+22938-Dysf | chr6 | Dysf | 0.811185411 | 0 | 0 | 22939 | 1110 |
| chr6\_84152409\_84149675\_+2734-Dysf | chr6 | Dysf | 0.912583588 | 1.276164256 | 0.722584089 | 2735 | 507 |
| chr6\_84211267\_84203183\_+8084-Dysf | chr6 | Dysf | 0 | 0.182309179 | 0 | 8085 | 8085 |
| chr6\_85269963\_85256343\_-13620-Sfxn5 | chr6 | Sfxn5 | 1.115379941 | 0.729236718 | 0.361292045 | 13621 | 268 |
| chr6\_85289788\_85229194\_-60594-Sfxn5 | chr6 | Sfxn5 | 0 | 0.182309179 | 0 | 60595 | 756 |
| chr6\_85289788\_85256343\_-33445-Sfxn5 | chr6 | Sfxn5 | 1.013981764 | 0 | 0 | 33446 | 376 |
| chr6\_85342061\_85341052\_-1009-na | chr6 | na | 0.811185411 | 0.729236718 | 0.541938067 | 1010 | 1010 |
| chr6\_85348991\_85347780\_-1211-Rab11fip5 | chr6 | Rab11fip5 | 0.405592706 | 0.729236718 | 0 | 1212 | 1113 |
| chr6\_86967373\_86944357\_+23016-Aak1 | chr6 | Aak1 | 0.202796353 | 0 | 0 | 23017 | 1729 |
| chr6\_86967373\_86959032\_+8341-Aak1 | chr6 | Aak1 | 0 | 0 | 0.180646022 | 8342 | 739 |
| chr6\_86998517\_86995840\_+2677-na | chr6 | na | 0 | 0 | 0.361292045 | 2678 | 2678 |
| chr6\_88298236\_88281549\_-16687-Eefsec | chr6 | Eefsec | 1.216778117 | 0 | 0.180646022 | 16688 | 817 |
| chr6\_88358642\_88281549\_-77093-Eefsec | chr6 | Eefsec | 0 | 0 | 0.180646022 | 77094 | 1079 |
| chr6\_88358642\_88352446\_-6196-Eefsec | chr6 | Eefsec | 0 | 0 | 0.180646022 | 6197 | 6197 |
| chr6\_89470746\_89464738\_-6008-Chchd6 | chr6 | Chchd6 | 0.608389058 | 0 | 0 | 6009 | 6009 |
| chr6\_90384252\_90378784\_+5468-Zxdc | chr6 | Zxdc | 0.202796353 | 0 | 0 | 5469 | 2592 |
| chr6\_90491803\_90485218\_+6585-na | chr6 | na | 0 | 0 | 0.180646022 | 6586 | 6586 |
| chr6\_90596973\_90576628\_+20345-Aldh1l1 | chr6 | Aldh1l1 | 0 | 0.729236718 | 0.180646022 | 20346 | 981 |
| chr6\_90640963\_90624812\_+16151-Slc41a3 | chr6 | Slc41a3 | 0 | 0.364618359 | 0.180646022 | 16152 | 697 |
| chr6\_90644233\_90633611\_+10622-Slc41a3 | chr6 | Slc41a3 | 0.202796353 | 0 | 0 | 10623 | 801 |
| chr6\_91065303\_91026805\_-38498-Nup210 | chr6 | Nup210 | 0.405592706 | 0 | 0 | 38499 | 2675 |
| chr6\_91087983\_91036353\_-51630-Nup210 | chr6 | Nup210 | 0.202796353 | 0 | 0 | 51631 | 3151 |
| chr6\_91699032\_91690480\_+8552-Slc6a6 | chr6 | Slc6a6 | 0 | 0.182309179 | 0 | 8553 | 8553 |
| chr6\_91713044\_91711512\_+1532-Slc6a6 | chr6 | Slc6a6 | 0.202796353 | 0 | 0.180646022 | 1533 | 1533 |
| chr6\_92152417\_92139780\_+12637-Nr2c2 | chr6 | Nr2c2 | 0.202796353 | 0.182309179 | 0.180646022 | 12638 | 415 |
| chr6\_92164293\_92149604\_+14689-Nr2c2 | chr6 | Nr2c2 | 0 | 0.364618359 | 0 | 14690 | 1598 |
| chr6\_92816643\_92807015\_-9628-Adamts9 | chr6 | Adamts9 | 0 | 0.364618359 | 0 | 9629 | 345 |
| chr6\_92860204\_92849292\_-10912-Adamts9 | chr6 | Adamts9 | 0 | 0.182309179 | 0 | 10913 | 870 |
| chr6\_92894386\_92887341\_-7045-Adamts9 | chr6 | Adamts9 | 0 | 0.364618359 | 0 | 7046 | 679 |
| chr6\_93201952\_93192109\_+9843-Gm38863 | chr6 | Gm38863 | 0 | 0 | 0.180646022 | 9844 | 9844 |
| chr6\_93271754\_93254714\_+17040-na | chr6 | na | 0 | 0.182309179 | 0 | 17041 | 17041 |
| chr6\_94050766\_93682952\_-367814-Magi1 | chr6 | Magi1 | 0 | 0 | 0.361292045 | 367815 | 367815 |
| chr6\_94535768\_94513805\_+21963-Slc25a26 | chr6 | Slc25a26 | 0.608389058 | 0.364618359 | 0 | 21964 | 21964 |
| chr6\_94565023\_94534144\_+30879-Slc25a26 | chr6 | Slc25a26 | 0 | 0.364618359 | 0 | 30880 | 334 |
| chr6\_94576378\_94549099\_+27279-na | chr6 | na | 0 | 0.09115459 | 0 | 27280 | 27280 |
| chr6\_94663998\_94654847\_-9151-Lrig1 | chr6 | Lrig1 | 0.608389058 | 0.09115459 | 0 | 9152 | 147 |
| chr6\_98006197\_97993127\_+13070-na | chr6 | na | 0 | 0 | 0.090323011 | 13071 | 13071 |
| chr6\_99402130\_99371780\_-30350-na | chr6 | na | 0.202796353 | 0 | 0 | 30351 | 30351 |
| chr6\_99402130\_99392615\_-9515-na | chr6 | na | 0.405592706 | 0.364618359 | 0 | 9516 | 9516 |
| chr6\_99460450\_99435216\_-25234-Foxp1 | chr6 | Foxp1 | 0.202796353 | 0 | 0 | 25235 | 25235 |
| chr7\_100407829\_100405958\_+1871-C2cd3 | chr7 | C2cd3 | 0 | 0 | 0.361292045 | 1872 | 472 |
| chr7\_100482755\_100479374\_+3381-Ucp3 | chr7 | Ucp3 | 0.202796353 | 0 | 0 | 3382 | 905 |
| chr7\_101722833\_101663894\_+58939-Clpb | chr7 | Clpb | 0 | 0 | 0.180646022 | 58940 | 782 |
| chr7\_102111339\_102106667\_+4672-Art1 | chr7 | Art1 | 0 | 0.182309179 | 0 | 4673 | 1326 |
| chr7\_102176405\_102160541\_-15864-Nup98 | chr7 | Nup98 | 0.202796353 | 0 | 0 | 15865 | 556 |
| chr7\_102186739\_102185861\_-878-Nup98 | chr7 | Nup98 | 0.202796353 | 0 | 0 | 879 | 289 |
| chr7\_102386201\_102354501\_+31700-Stim1 | chr7 | Stim1 | 0 | 0 | 0.180646022 | 31701 | 246 |
| chr7\_102415515\_102354501\_+61014-Stim1 | chr7 | Stim1 | 0 | 0.364618359 | 0 | 61015 | 652 |
| chr7\_105390352\_105381080\_-9272-Fam160a2 | chr7 | Fam160a2 | 0.202796353 | 0 | 0 | 9273 | 2828 |
| chr7\_107697698\_107681762\_+15936-Ppfibp2 | chr7 | Ppfibp2 | 0 | 0.182309179 | 0 | 15937 | 339 |
| chr7\_107708872\_107681762\_+27110-Ppfibp2 | chr7 | Ppfibp2 | 0 | 0.182309179 | 0.090323011 | 27111 | 432 |
| chr7\_109935553\_109926827\_-8726-Dennd5a | chr7 | Dennd5a | 0.202796353 | 0 | 0 | 8727 | 1028 |
| chr7\_110442367\_110399296\_-43071-Sbf2 | chr7 | Sbf2 | 0 | 0 | 0.180646022 | 43072 | 954 |
| chr7\_111077747\_111076696\_-1051-Eif4g2 | chr7 | Eif4g2 | 0 | 0 | 0.180646022 | 1052 | 594 |
| chr7\_111080964\_111079293\_-1671-Eif4g2 | chr7 | Eif4g2 | 0.202796353 | 0 | 0 | 1672 | 310 |
| chr7\_112104468\_112101738\_+2730-Usp47 | chr7 | Usp47 | 0 | 0.182309179 | 0 | 2731 | 492 |
| chr7\_112842102\_112759384\_+82718-Tead1 | chr7 | Tead1 | 0 | 0.182309179 | 0 | 82719 | 447 |
| chr7\_112861556\_112839416\_+22140-Tead1 | chr7 | Tead1 | 0.202796353 | 0 | 0 | 22141 | 572 |
| chr7\_113234696\_113225062\_+9634-Arntl | chr7 | Arntl | 0.202796353 | 0 | 0 | 9635 | 9635 |
| chr7\_114060419\_114046647\_-13772-Rras2 | chr7 | Rras2 | 0 | 0.182309179 | 0 | 13773 | 13773 |
| chr7\_115701785\_115659516\_-42269-Sox6 | chr7 | Sox6 | 0 | 0 | 0.180646022 | 42270 | 332 |
| chr7\_115777258\_115777051\_-207-Sox6 | chr7 | Sox6 | 0.405592706 | 0 | 0 | 208 | 208 |
| chr7\_115801609\_115701696\_-99913-Sox6 | chr7 | Sox6 | 0.405592706 | 0 | 0 | 99914 | 539 |
| chr7\_115801609\_115801369\_-240-Sox6 | chr7 | Sox6 | 0 | 0 | 0.180646022 | 241 | 241 |
| chr7\_115975538\_115809811\_-165727-na | chr7 | na | 0.202796353 | 0 | 0 | 165728 | 165728 |
| chr7\_115975538\_115943894\_-31644-na | chr7 | na | 0 | 0 | 0.090323011 | 31645 | 31645 |
| chr7\_116021756\_115777051\_-244705-Sox6 | chr7 | Sox6 | 0.405592706 | 0 | 0 | 244706 | 244706 |
| chr7\_116378763\_116372795\_-5968-Pik3c2a | chr7 | Pik3c2a | 0 | 0.182309179 | 0 | 5969 | 692 |
| chr7\_118555968\_118549935\_-6033-Tmc7 | chr7 | Tmc7 | 0 | 0 | 0.361292045 | 6034 | 626 |
| chr7\_118760245\_118748126\_+12119-9030624J02Rik | chr7 | 9030624J02Rik | 0 | 0 | 0.180646022 | 12120 | 439 |
| chr7\_120889751\_120879814\_+9937-Eef2k | chr7 | Eef2k | 0 | 0 | 0.180646022 | 9938 | 1032 |
| chr7\_120899546\_120879814\_+19732-Eef2k | chr7 | Eef2k | 0.405592706 | 0 | 0 | 19733 | 1660 |
| chr7\_122010758\_121997291\_-13467-Gga2 | chr7 | Gga2 | 0 | 0 | 0.180646022 | 13468 | 1077 |
| chr7\_122123708\_122113250\_-10458-Palb2 | chr7 | Palb2 | 0.202796353 | 0 | 0.361292045 | 10459 | 599 |
| chr7\_123162877\_123143750\_+19127-Tnrc6a | chr7 | Tnrc6a | 0 | 0.546927538 | 0 | 19128 | 494 |
| chr7\_123172118\_123162494\_+9624-Tnrc6a | chr7 | Tnrc6a | 0 | 0 | 0.180646022 | 9625 | 2967 |
| chr7\_123331265\_123318387\_-12878-Arhgap17 | chr7 | Arhgap17 | 0.405592706 | 0 | 0 | 12879 | 520 |
| chr7\_125770703\_125752973\_+17730-D430042O09Rik | chr7 | D430042O09Rik | 0 | 0 | 0.361292045 | 17731 | 477 |
| chr7\_126153279\_126128227\_-25052-Xpo6 | chr7 | Xpo6 | 0 | 0.182309179 | 0 | 25053 | 1008 |
| chr7\_126153279\_126140565\_-12714-Xpo6 | chr7 | Xpo6 | 0 | 0.364618359 | 0 | 12715 | 736 |
| chr7\_126153279\_126149234\_-4045-Xpo6 | chr7 | Xpo6 | 0 | 0.182309179 | 0 | 4046 | 626 |
| chr7\_126171142\_126156724\_-14418-Xpo6 | chr7 | Xpo6 | 0 | 0 | 0.180646022 | 14419 | 549 |
| chr7\_126447516\_126446871\_-645-Atp2a1 | chr7 | Atp2a1 | 0 | 0 | 0.180646022 | 646 | 370 |
| chr7\_126450550\_126446871\_-3679-Atp2a1 | chr7 | Atp2a1 | 0 | 0 | 0.180646022 | 3680 | 1561 |
| chr7\_126450550\_126450105\_-445-Atp2a1 | chr7 | Atp2a1 | 0 | 0.182309179 | 0.180646022 | 446 | 345 |
| chr7\_126452786\_126446545\_-6241-Atp2a1 | chr7 | Atp2a1 | 0.202796353 | 0 | 0 | 6242 | 1735 |
| chr7\_126453450\_126452655\_-795-Atp2a1 | chr7 | Atp2a1 | 0.405592706 | 0 | 0 | 796 | 324 |
| chr7\_126462187\_126453023\_-9164-Atp2a1 | chr7 | Atp2a1 | 0 | 0.182309179 | 0 | 9165 | 1151 |
| chr7\_126557825\_126551975\_-5850-Eif3c | chr7 | Eif3c | 0 | 0.182309179 | 0 | 5851 | 1142 |
| chr7\_126797776\_126797644\_-132-Aldoa | chr7 | Aldoa | 0 | 0.364618359 | 0 | 133 | 133 |
| chr7\_127214130\_127213610\_+520-Mylpf | chr7 | Mylpf | 0 | 0.182309179 | 0 | 521 | 168 |
| chr7\_127486889\_127484542\_+2347-Fbrs | chr7 | Fbrs | 1.013981764 | 0.364618359 | 0.180646022 | 2348 | 742 |
| chr7\_127522129\_127519581\_+2548-Srcap | chr7 | Srcap | 0 | 0.364618359 | 0 | 2549 | 579 |
| chr7\_127525905\_127525293\_+612-Srcap | chr7 | Srcap | 0 | 0.182309179 | 0 | 613 | 498 |
| chr7\_127532219\_127521989\_+10230-Srcap | chr7 | Srcap | 0.202796353 | 0 | 0.180646022 | 10231 | 2037 |
| chr7\_127532219\_127530252\_+1967-Srcap | chr7 | Srcap | 0 | 0.182309179 | 0 | 1968 | 1145 |
| chr7\_127534961\_127534548\_+413-Srcap | chr7 | Srcap | 0 | 0.182309179 | 0 | 414 | 324 |
| chr7\_127549735\_127521989\_+27746-Srcap | chr7 | Srcap | 0 | 0.182309179 | 0 | 27747 | 5635 |
| chr7\_127553294\_127552259\_+1035-Srcap | chr7 | Srcap | 0.202796353 | 0 | 0 | 1036 | 602 |
| chr7\_127563292\_127552259\_+11033-Srcap | chr7 | Srcap | 0.202796353 | 0 | 0 | 11034 | 11034 |
| chr7\_127787586\_127787126\_+460-Setd1a | chr7 | Setd1a | 0.202796353 | 0 | 0 | 461 | 265 |
| chr7\_128685284\_128675298\_+9986-Inpp5f | chr7 | Inpp5f | 0 | 0 | 0.180646022 | 9987 | 770 |
| chr7\_128724208\_128715946\_-8262-Mcmbp | chr7 | Mcmbp | 0 | 0.182309179 | 0 | 8263 | 430 |
| chr7\_128764149\_128750059\_+14090-Sec23ip | chr7 | Sec23ip | 0 | 0.182309179 | 0 | 14091 | 1584 |
| chr7\_129613973\_129600437\_+13536-Wdr11 | chr7 | Wdr11 | 0.405592706 | 0 | 0 | 13537 | 1308 |
| chr7\_130627499\_130601837\_+25662-Tacc2 | chr7 | Tacc2 | 0.405592706 | 0.182309179 | 0.722584089 | 25663 | 5324 |
| chr7\_130627499\_130619602\_+7897-Tacc2 | chr7 | Tacc2 | 2.433556234 | 1.914246384 | 2.34839829 | 7898 | 7898 |
| chr7\_130627499\_130621721\_+5778-Tacc2 | chr7 | Tacc2 | 6.895075996 | 3.281565229 | 7.045194871 | 5779 | 5223 |
| chr7\_130659288\_130621721\_+37567-Tacc2 | chr7 | Tacc2 | 0.202796353 | 0 | 0 | 37568 | 37568 |
| chr7\_130674739\_130663016\_+11723-Tacc2 | chr7 | Tacc2 | 0 | 0.182309179 | 0.541938067 | 11724 | 264 |
| chr7\_130674739\_130665372\_+9367-Tacc2 | chr7 | Tacc2 | 0.202796353 | 0 | 0 | 9368 | 9368 |
| chr7\_130744616\_130739812\_+4804-Tacc2 | chr7 | Tacc2 | 0 | 0.182309179 | 0 | 4805 | 581 |
| chr7\_130753661\_130739812\_+13849-Tacc2 | chr7 | Tacc2 | 0 | 0.729236718 | 0.903230112 | 13850 | 846 |
| chr7\_131361936\_131350651\_-11285-2310057M21Rik | chr7 | 2310057M21Rik | 0.405592706 | 0 | 0 | 11286 | 936 |
| chr7\_132271001\_132262683\_-8318-Chst15 | chr7 | Chst15 | 0 | 0.182309179 | 0 | 8319 | 1641 |
| chr7\_132760167\_132759389\_-778-Fam53b | chr7 | Fam53b | 0 | 0.182309179 | 0.180646022 | 779 | 779 |
| chr7\_132779385\_132771578\_-7807-Fam53b | chr7 | Fam53b | 0.304194529 | 0.09115459 | 0 | 7808 | 302 |
| chr7\_132950435\_132949585\_+850-Zranb1 | chr7 | Zranb1 | 0 | 0 | 0.361292045 | 851 | 851 |
| chr7\_132960734\_132948044\_+12690-Zranb1 | chr7 | Zranb1 | 0 | 0.546927538 | 0.180646022 | 12691 | 12691 |
| chr7\_132960734\_132949585\_+11149-Zranb1 | chr7 | Zranb1 | 0.608389058 | 0 | 0.180646022 | 11150 | 11150 |
| chr7\_132972761\_132949585\_+23176-Zranb1 | chr7 | Zranb1 | 0.202796353 | 0 | 0 | 23177 | 1265 |
| chr7\_132972761\_132971186\_+1575-Zranb1 | chr7 | Zranb1 | 0 | 0.09115459 | 0 | 1576 | 226 |
| chr7\_132973623\_132972185\_+1438-Zranb1 | chr7 | Zranb1 | 0 | 0.182309179 | 0 | 1439 | 1439 |
| chr7\_133656683\_133650501\_+6182-Edrf1 | chr7 | Edrf1 | 0 | 0.182309179 | 0 | 6183 | 894 |
| chr7\_133749036\_133733968\_-15068-Dhx32 | chr7 | Dhx32 | 0.405592706 | 0 | 0.180646022 | 15069 | 1072 |
| chr7\_134753434\_134734050\_+19384-Dock1 | chr7 | Dock1 | 0.202796353 | 0 | 0 | 19385 | 887 |
| chr7\_134763973\_134744950\_+19023-Dock1 | chr7 | Dock1 | 0 | 0.182309179 | 0 | 19024 | 843 |
| chr7\_134772475\_134760812\_+11663-Dock1 | chr7 | Dock1 | 0 | 0.546927538 | 0 | 11664 | 711 |
| chr7\_134804650\_134771467\_+33183-Dock1 | chr7 | Dock1 | 0 | 0.182309179 | 0 | 33184 | 821 |
| chr7\_139567437\_139519431\_+48006-Inpp5a | chr7 | Inpp5a | 0 | 0 | 0.180646022 | 48007 | 48007 |
| chr7\_140113133\_140109987\_-3146-Echs1 | chr7 | Echs1 | 0 | 0 | 0.180646022 | 3147 | 651 |
| chr7\_142016505\_142016079\_-426-Mob2 | chr7 | Mob2 | 0 | 0.182309179 | 0 | 427 | 255 |
| chr7\_142025957\_142009443\_-16514-Mob2 | chr7 | Mob2 | 0.202796353 | 0 | 0 | 16515 | 644 |
| chr7\_142382612\_142380774\_+1838-na | chr7 | na | 0.101398176 | 0 | 0 | 1839 | 1839 |
| chr7\_144485208\_144481085\_-4123-Ppfia1 | chr7 | Ppfia1 | 0.405592706 | 0 | 0 | 4124 | 685 |
| chr7\_144500403\_144491452\_-8951-Ppfia1 | chr7 | Ppfia1 | 0 | 0 | 0.180646022 | 8952 | 702 |
| chr7\_144614924\_144610843\_-4081-Ano1 | chr7 | Ano1 | 0 | 0 | 0.180646022 | 4082 | 447 |
| chr7\_144650554\_144644708\_-5846-Ano1 | chr7 | Ano1 | 0 | 0.182309179 | 0 | 5847 | 216 |
| chr7\_19043575\_19036662\_+6913-Sympk | chr7 | Sympk | 0 | 0.546927538 | 0 | 6914 | 1073 |
| chr7\_19261213\_19260581\_-632-Vasp | chr7 | Vasp | 0.202796353 | 0 | 0 | 633 | 381 |
| chr7\_19415533\_19414119\_+1414-Ckm | chr7 | Ckm | 2.027963528 | 0.729236718 | 1.083876134 | 1415 | 500 |
| chr7\_19416890\_19414897\_+1993-Ckm | chr7 | Ckm | 0.811185411 | 0.546927538 | 1.083876134 | 1994 | 460 |
| chr7\_19420296\_19416719\_+3577-Ckm | chr7 | Ckm | 0 | 0 | 0.361292045 | 3578 | 486 |
| chr7\_19421587\_19416719\_+4868-Ckm | chr7 | Ckm | 0.202796353 | 0 | 0 | 4869 | 4869 |
| chr7\_19451756\_19443117\_-8639-Mark4 | chr7 | Mark4 | 0 | 0.182309179 | 0 | 8640 | 735 |
| chr7\_25273633\_25270835\_+2798-Cic | chr7 | Cic | 0 | 0 | 0.180646022 | 2799 | 2799 |
| chr7\_28750291\_28748955\_+1336-Sars2 | chr7 | Sars2 | 0 | 0 | 0.180646022 | 1337 | 401 |
| chr7\_29009567\_29008384\_-1183-Ryr1 | chr7 | Ryr1 | 0.202796353 | 0 | 0 | 1184 | 343 |
| chr7\_29040893\_29035962\_-4931-Ryr1 | chr7 | Ryr1 | 0.202796353 | 0 | 0 | 4932 | 4932 |
| chr7\_29040893\_29035980\_-4913-Ryr1 | chr7 | Ryr1 | 18.45446811 | 12.03240584 | 13.36780565 | 4914 | 650 |
| chr7\_29040893\_29038347\_-2546-na | chr7 | na | 0 | 0.09115459 | 0.090323011 | 2547 | 2547 |
| chr7\_29043929\_29024003\_-19926-Ryr1 | chr7 | Ryr1 | 3.041945292 | 1.093855076 | 1.264522156 | 19927 | 1073 |
| chr7\_29043929\_29040388\_-3541-Ryr1 | chr7 | Ryr1 | 2.027963528 | 0.364618359 | 0.903230112 | 3542 | 404 |
| chr7\_29049041\_29048778\_-263-Ryr1 | chr7 | Ryr1 | 0.405592706 | 0 | 0 | 264 | 127 |
| chr7\_29054996\_29053062\_-1934-Ryr1 | chr7 | Ryr1 | 0 | 0.182309179 | 0 | 1935 | 306 |
| chr7\_29062224\_29052014\_-10210-Ryr1 | chr7 | Ryr1 | 0.608389058 | 0 | 0 | 10211 | 1669 |
| chr7\_29065625\_29035980\_-29645-Ryr1 | chr7 | Ryr1 | 0 | 0.182309179 | 0.903230112 | 29646 | 3226 |
| chr7\_29065625\_29064429\_-1196-Ryr1 | chr7 | Ryr1 | 0 | 0 | 0.361292045 | 1197 | 350 |
| chr7\_29070183\_29009055\_-61128-Ryr1 | chr7 | Ryr1 | 0 | 0 | 0.180646022 | 61129 | 6489 |
| chr7\_29074977\_29064538\_-10439-Ryr1 | chr7 | Ryr1 | 0 | 0 | 0.180646022 | 10440 | 2336 |
| chr7\_29086324\_29061508\_-24816-Ryr1 | chr7 | Ryr1 | 0 | 0 | 0.180646022 | 24817 | 4748 |
| chr7\_29086324\_29064429\_-21895-Ryr1 | chr7 | Ryr1 | 0 | 0.364618359 | 0 | 21896 | 4535 |
| chr7\_29086324\_29078519\_-7805-Ryr1 | chr7 | Ryr1 | 0.202796353 | 0 | 0 | 7806 | 1611 |
| chr7\_29086324\_29083371\_-2953-Ryr1 | chr7 | Ryr1 | 0 | 0.364618359 | 0 | 2954 | 877 |
| chr7\_29102999\_29075164\_-27835-Ryr1 | chr7 | Ryr1 | 0.202796353 | 0 | 0 | 27836 | 4857 |
| chr7\_29388151\_29383196\_-4955-Sipa1l3 | chr7 | Sipa1l3 | 0.202796353 | 0 | 0 | 4956 | 626 |
| chr7\_30612474\_30606875\_-5599-Upk1a | chr7 | Upk1a | 0 | 0.182309179 | 0 | 5600 | 472 |
| chr7\_34285953\_34284702\_-1251-4931406P16Rik | chr7 | 4931406P16Rik | 0 | 0.182309179 | 0.361292045 | 1252 | 1252 |
| chr7\_34371184\_34353378\_-17806-Lsm14a | chr7 | Lsm14a | 0 | 0.182309179 | 0 | 17807 | 17807 |
| chr7\_34371184\_34353390\_-17794-Lsm14a | chr7 | Lsm14a | 0.202796353 | 0.729236718 | 0.361292045 | 17795 | 848 |
| chr7\_34375392\_34351286\_-24106-Lsm14a | chr7 | Lsm14a | 0 | 0 | 0.180646022 | 24107 | 1244 |
| chr7\_34611935\_34611801\_-134-na | chr7 | na | 1.216778117 | 0.364618359 | 0.722584089 | 135 | 135 |
| chr7\_35795618\_35787718\_-7900-Zfp507 | chr7 | Zfp507 | 0 | 0.364618359 | 0 | 7901 | 2326 |
| chr7\_37969697\_37961388\_-8309-Uri1 | chr7 | Uri1 | 0.811185411 | 0.729236718 | 0.361292045 | 8310 | 1362 |
| chr7\_37982948\_37961388\_-21560-Uri1 | chr7 | Uri1 | 1.216778117 | 1.276164256 | 0.180646022 | 21561 | 1577 |
| chr7\_38054547\_38050127\_-4420-Gm30684 | chr7 | Gm30684 | 0 | 0 | 0.180646022 | 4421 | 470 |
| chr7\_41628076\_41611676\_+16400-2610021A01Rik | chr7 | 2610021A01Rik | 0.202796353 | 0 | 0 | 16401 | 3852 |
| chr7\_4444321\_4434994\_-9327-Rdh13 | chr7 | Rdh13 | 0 | 0.182309179 | 0 | 9328 | 415 |
| chr7\_44505705\_44503637\_-2068-Mybpc2 | chr7 | Mybpc2 | 0.405592706 | 0 | 0 | 2069 | 624 |
| chr7\_44505705\_44504999\_-706-Mybpc2 | chr7 | Mybpc2 | 0.202796353 | 0 | 0 | 707 | 437 |
| chr7\_44515021\_44508231\_-6790-Mybpc2 | chr7 | Mybpc2 | 0.202796353 | 0.182309179 | 0 | 6791 | 1205 |
| chr7\_44517004\_44508969\_-8035-Mybpc2 | chr7 | Mybpc2 | 0 | 0.182309179 | 0 | 8036 | 1628 |
| chr7\_44520392\_44514849\_-5543-Mybpc2 | chr7 | Mybpc2 | 0 | 0.182309179 | 0 | 5544 | 791 |
| chr7\_44520787\_44520333\_-454-Mybpc2 | chr7 | Mybpc2 | 0.101398176 | 0 | 0 | 455 | 109 |
| chr7\_44665500\_44652431\_-13069-Myh14 | chr7 | Myh14 | 0.202796353 | 0 | 0 | 13070 | 1105 |
| chr7\_44882866\_44867060\_-15806-Med25 | chr7 | Med25 | 0 | 0.09115459 | 0 | 15807 | 15807 |
| chr7\_45149766\_45142780\_-6986-Aldh16a1 | chr7 | Aldh16a1 | 0.202796353 | 0 | 0 | 6987 | 2157 |
| chr7\_45451914\_45447898\_+4016-Gys1 | chr7 | Gys1 | 0 | 0.182309179 | 0 | 4017 | 501 |
| chr7\_45576002\_45447898\_+128104-Plekha4 | chr7 | Plekha4 | 0 | 0 | 0.361292045 | 128105 | 128105 |
| chr7\_45588528\_45575431\_+13097-Bcat2 | chr7 | Bcat2 | 0 | 0.364618359 | 0 | 13098 | 1412 |
| chr7\_46288985\_46262640\_+26345-Otog | chr7 | Otog | 0.202796353 | 0 | 0 | 26346 | 4040 |
| chr7\_46515704\_46511955\_-3749-na | chr7 | na | 0.202796353 | 0 | 0 | 3750 | 3750 |
| chr7\_46814204\_46801672\_+12532-Gtf2h1 | chr7 | Gtf2h1 | 0 | 0 | 0.180646022 | 12533 | 1154 |
| chr7\_4682048\_4677707\_-4341-Hspbp1 | chr7 | Hspbp1 | 0 | 0.182309179 | 0 | 4342 | 430 |
| chr7\_49430725\_49420174\_+10551-Nav2 | chr7 | Nav2 | 0 | 0 | 0.180646022 | 10552 | 10552 |
| chr7\_49554259\_49545800\_+8459-Nav2 | chr7 | Nav2 | 0 | 0.182309179 | 0 | 8460 | 1559 |
| chr7\_51566549\_51546662\_+19887-Ano5 | chr7 | Ano5 | 0 | 0 | 0.541938067 | 19888 | 814 |
| chr7\_51570418\_51546662\_+23756-Ano5 | chr7 | Ano5 | 0 | 0 | 0.180646022 | 23757 | 966 |
| chr7\_51585528\_51546662\_+38866-Ano5 | chr7 | Ano5 | 0 | 0.182309179 | 0 | 38867 | 1869 |
| chr7\_64371659\_64361940\_-9719-Fan1 | chr7 | Fan1 | 0.811185411 | 0 | 0 | 9720 | 938 |
| chr7\_66088949\_66080332\_+8617-Vimp | chr7 | Vimp | 0.202796353 | 0 | 0 | 8618 | 594 |
| chr7\_66660255\_66381452\_-278803-Aldh1a3 | chr7 | Aldh1a3 | 0.202796353 | 0 | 0 | 278804 | 278804 |
| chr7\_67268400\_67264865\_-3535-Mef2a | chr7 | Mef2a | 0.202796353 | 0.182309179 | 0.180646022 | 3536 | 412 |
| chr7\_68259289\_68249467\_-9822-Pgpep1l | chr7 | Pgpep1l | 0.202796353 | 0 | 0 | 9823 | 9823 |
| chr7\_73475579\_73463636\_-11943-Chd2 | chr7 | Chd2 | 0 | 0 | 0.180646022 | 11944 | 11944 |
| chr7\_73484597\_73468456\_-16141-Chd2 | chr7 | Chd2 | 0 | 0 | 0.180646022 | 16142 | 1413 |
| chr7\_73493641\_73468456\_-25185-Chd2 | chr7 | Chd2 | 0 | 0 | 0.180646022 | 25186 | 1911 |
| chr7\_73519708\_73490479\_-29229-Chd2 | chr7 | Chd2 | 0 | 0 | 0.180646022 | 29230 | 1938 |
| chr7\_73540904\_73474506\_-66398-Chd2 | chr7 | Chd2 | 0.202796353 | 0 | 0 | 66399 | 2947 |
| chr7\_75615048\_75579502\_+35546-Akap13 | chr7 | Akap13 | 0 | 0.182309179 | 0 | 35547 | 3878 |
| chr7\_75704539\_75683394\_+21145-Akap13 | chr7 | Akap13 | 0.202796353 | 0 | 0 | 21146 | 719 |
| chr7\_75730611\_75663412\_+67199-Akap13 | chr7 | Akap13 | 0 | 0 | 0.180646022 | 67200 | 2641 |
| chr7\_76335324\_76325024\_+10300-Agbl1 | chr7 | Agbl1 | 0 | 0 | 0.180646022 | 10301 | 226 |
| chr7\_76523437\_76519304\_+4133-na | chr7 | na | 0.202796353 | 0 | 0 | 4134 | 4134 |
| chr7\_76589549\_76516777\_+72772-Agbl1 | chr7 | Agbl1 | 0 | 0.182309179 | 0 | 72773 | 72773 |
| chr7\_80370731\_80369746\_-985-Man2a2 | chr7 | Man2a2 | 0.405592706 | 0.364618359 | 0 | 986 | 986 |
| chr7\_80397250\_80395335\_-1915-Furin | chr7 | Furin | 0.202796353 | 0 | 0.361292045 | 1916 | 498 |
| chr7\_81039265\_81037350\_+1915-Zfp592 | chr7 | Zfp592 | 0 | 0.364618359 | 0.180646022 | 1916 | 874 |
| chr7\_81078833\_81076873\_+1960-Alpk3 | chr7 | Alpk3 | 0.202796353 | 0 | 0 | 1961 | 1406 |
| chr7\_81095054\_81092147\_+2907-Alpk3 | chr7 | Alpk3 | 0.405592706 | 0 | 0 | 2908 | 2186 |
| chr7\_81095529\_81092147\_+3382-Alpk3 | chr7 | Alpk3 | 0 | 0.182309179 | 0 | 3383 | 2407 |
| chr7\_81095693\_81076873\_+18820-Alpk3 | chr7 | Alpk3 | 0.202796353 | 0 | 0 | 18821 | 3849 |
| chr7\_81095693\_81092147\_+3546-Alpk3 | chr7 | Alpk3 | 0 | 1.093855076 | 0.180646022 | 3547 | 2443 |
| chr7\_81283013\_81281178\_+1835-Pde8a | chr7 | Pde8a | 0 | 0.182309179 | 0 | 1836 | 248 |
| chr7\_81436377\_81355875\_-80502-Cpeb1 | chr7 | Cpeb1 | 0 | 0 | 0.180646022 | 80503 | 1200 |
| chr7\_81436377\_81372012\_-64365-Cpeb1 | chr7 | Cpeb1 | 0.202796353 | 0 | 0 | 64366 | 367 |
| chr7\_81436377\_81431562\_-4815-Cpeb1 | chr7 | Cpeb1 | 0 | 0 | 0.180646022 | 4816 | 4816 |
| chr7\_81550025\_81544960\_-5065-Fsd2 | chr7 | Fsd2 | 0.202796353 | 0 | 0 | 5066 | 564 |
| chr7\_82683081\_82649526\_+33555-Efl1 | chr7 | Efl1 | 0 | 0.182309179 | 0 | 33556 | 947 |
| chr7\_82686764\_82681352\_+5412-Efl1 | chr7 | Efl1 | 0 | 0 | 0.361292045 | 5413 | 561 |
| chr7\_89962361\_89955531\_-6830-Eed | chr7 | Eed | 0 | 0.364618359 | 0 | 6831 | 339 |
| chr7\_89971605\_89964729\_-6876-Eed | chr7 | Eed | 0 | 0.182309179 | 0 | 6877 | 500 |
| chr7\_89977049\_89962256\_-14793-Eed | chr7 | Eed | 0 | 0 | 0.180646022 | 14794 | 852 |
| chr7\_90173075\_90169182\_+3893-Picalm | chr7 | Picalm | 0.202796353 | 0 | 0 | 3894 | 355 |
| chr7\_90191753\_90160448\_+31305-Picalm | chr7 | Picalm | 0.405592706 | 0 | 0 | 31306 | 1649 |
| chr7\_90197020\_90160448\_+36572-Picalm | chr7 | Picalm | 0.811185411 | 0.729236718 | 0.903230112 | 36573 | 1838 |
| chr7\_90197020\_90189150\_+7870-Picalm | chr7 | Picalm | 0.811185411 | 0.364618359 | 0 | 7871 | 560 |
| chr7\_91626813\_91626329\_+484-na | chr7 | na | 0 | 0 | 0.180646022 | 485 | 485 |
| chr7\_92665865\_92645990\_-19875-Pcf11 | chr7 | Pcf11 | 0.202796353 | 0.729236718 | 0.722584089 | 19876 | 4647 |
| chr7\_92665865\_92648926\_-16939-Pcf11 | chr7 | Pcf11 | 0 | 0.182309179 | 0 | 16940 | 4178 |
| chr7\_97040036\_97023618\_+16418-Nars2 | chr7 | Nars2 | 0.202796353 | 0.182309179 | 0.180646022 | 16419 | 779 |
| chr7\_97326060\_97319967\_-6093-Usp35 | chr7 | Usp35 | 0 | 0.182309179 | 0 | 6094 | 1293 |
| chr7\_97664766\_97653053\_+11713-Rsf1 | chr7 | Rsf1 | 0 | 0.182309179 | 0.180646022 | 11714 | 2131 |
| chr7\_97670882\_97660813\_+10069-Rsf1 | chr7 | Rsf1 | 0.202796353 | 0 | 0.180646022 | 10070 | 2161 |
| chr7\_97679142\_97660813\_+18329-Rsf1 | chr7 | Rsf1 | 0.405592706 | 0 | 0 | 18330 | 2602 |
| chr7\_98610865\_98599752\_-11113-Emsy | chr7 | Emsy | 0 | 0.182309179 | 0 | 11114 | 562 |
| chr7\_99424229\_99387104\_+37125-Gdpd5 | chr7 | Gdpd5 | 0 | 0.182309179 | 0 | 37126 | 603 |
| chr7\_99814307\_99813193\_-1114-na | chr7 | na | 0 | 0.182309179 | 0 | 1115 | 1115 |
| chr8\_105202547\_105178593\_+23954-Cbfb | chr8 | Cbfb | 0.202796353 | 0.364618359 | 0 | 23955 | 330 |
| chr8\_105202578\_105178593\_+23985-Cbfb | chr8 | Cbfb | 0 | 0.729236718 | 0 | 23986 | 361 |
| chr8\_105666792\_105663754\_+3038-Ctcf | chr8 | Ctcf | 0.202796353 | 0.546927538 | 0 | 3039 | 1095 |
| chr8\_105888755\_105888388\_+367-Edc4 | chr8 | Edc4 | 0.405592706 | 0 | 0 | 368 | 291 |
| chr8\_106030443\_106025906\_+4537-Dus2 | chr8 | Dus2 | 0 | 0 | 0.361292045 | 4538 | 138 |
| chr8\_106109129\_106096164\_+12965-Nfatc3 | chr8 | Nfatc3 | 0.405592706 | 0 | 0 | 12966 | 1502 |
| chr8\_106725285\_106695449\_+29836-Tango6 | chr8 | Tango6 | 0.202796353 | 0 | 0 | 29837 | 1143 |
| chr8\_106748895\_106716609\_+32286-Tango6 | chr8 | Tango6 | 0 | 0.182309179 | 0 | 32287 | 32287 |
| chr8\_107315261\_107314202\_-1059-na | chr8 | na | 0 | 0 | 0.180646022 | 1060 | 1060 |
| chr8\_107361824\_107338809\_+23015-Nfat5 | chr8 | Nfat5 | 0 | 0 | 0.180646022 | 23016 | 1518 |
| chr8\_107458001\_107324639\_+133362-Nfat5 | chr8 | Nfat5 | 0.405592706 | 0 | 0 | 133363 | 133363 |
| chr8\_109819042\_109802947\_+16095-Ap1g1 | chr8 | Ap1g1 | 0 | 0.364618359 | 0 | 16096 | 329 |
| chr8\_111124612\_111121148\_+3464-Pdpr | chr8 | Pdpr | 0 | 0 | 1.083876134 | 3465 | 415 |
| chr8\_111496895\_111490292\_-6603-Wdr59 | chr8 | Wdr59 | 0 | 0.182309179 | 0 | 6604 | 441 |
| chr8\_11203008\_11201658\_-1350-Col4a1 | chr8 | Col4a1 | 0 | 0.546927538 | 0 | 1351 | 288 |
| chr8\_114489004\_114444468\_+44536-Wwox | chr8 | Wwox | 0 | 0 | 0.180646022 | 44537 | 409 |
| chr8\_114712251\_114706201\_+6050-Wwox | chr8 | Wwox | 0.405592706 | 0 | 0 | 6051 | 451 |
| chr8\_11562334\_11561418\_+916-na | chr8 | na | 0 | 0 | 0.180646022 | 917 | 917 |
| chr8\_117456957\_117426490\_+30467-Cmip | chr8 | Cmip | 0 | 0.182309179 | 0 | 30468 | 1524 |
| chr8\_117621263\_117612904\_+8359-Plcg2 | chr8 | Plcg2 | 0.202796353 | 0 | 0 | 8360 | 518 |
| chr8\_11800868\_11785713\_+15155-Arhgef7 | chr8 | Arhgef7 | 0.202796353 | 0 | 0 | 15156 | 482 |
| chr8\_11809576\_11782525\_+27051-Arhgef7 | chr8 | Arhgef7 | 0 | 0 | 0.361292045 | 27052 | 935 |
| chr8\_118505715\_118505604\_+111-Cdh13 | chr8 | Cdh13 | 0.304194529 | 0 | 0 | 112 | 112 |
| chr8\_118757484\_118757368\_+116-Cdh13 | chr8 | Cdh13 | 0 | 0 | 0.180646022 | 117 | 117 |
| chr8\_118968193\_118505604\_+462589-Cdh13 | chr8 | Cdh13 | 0.202796353 | 0 | 0 | 462590 | 736 |
| chr8\_119535377\_119531049\_-4328-Mbtps1 | chr8 | Mbtps1 | 0.811185411 | 0.364618359 | 0 | 4329 | 417 |
| chr8\_119538960\_119531049\_-7911-Mbtps1 | chr8 | Mbtps1 | 0 | 0.182309179 | 0 | 7912 | 602 |
| chr8\_119546241\_119515578\_-30663-Mbtps1 | chr8 | Mbtps1 | 0 | 0.182309179 | 0 | 30664 | 2541 |
| chr8\_119546241\_119528924\_-17317-Mbtps1 | chr8 | Mbtps1 | 0.405592706 | 0 | 0.180646022 | 17318 | 1430 |
| chr8\_119546241\_119535275\_-10966-Mbtps1 | chr8 | Mbtps1 | 0 | 0.182309179 | 0 | 10967 | 971 |
| chr8\_119546241\_119538127\_-8114-Mbtps1 | chr8 | Mbtps1 | 0.202796353 | 0 | 0 | 8115 | 868 |
| chr8\_119546241\_119541585\_-4656-Mbtps1 | chr8 | Mbtps1 | 0.202796353 | 0.364618359 | 0 | 4657 | 683 |
| chr8\_119942138\_119931849\_+10289-Usp10 | chr8 | Usp10 | 0.405592706 | 0 | 0.180646022 | 10290 | 1156 |
| chr8\_120354179\_120353990\_+189-Gse1 | chr8 | Gse1 | 0 | 0.182309179 | 0 | 190 | 190 |
| chr8\_120489151\_120488708\_+443-na | chr8 | na | 0 | 0 | 0.180646022 | 444 | 444 |
| chr8\_121820188\_121804947\_-15241-Klhdc4 | chr8 | Klhdc4 | 0.405592706 | 0.364618359 | 0.903230112 | 15242 | 457 |
| chr8\_121820220\_121804947\_-15273-Klhdc4 | chr8 | Klhdc4 | 0 | 0 | 0.180646022 | 15274 | 489 |
| chr8\_122781588\_122779946\_+1642-Acsf3 | chr8 | Acsf3 | 0.405592706 | 0 | 0 | 1643 | 846 |
| chr8\_123067097\_123066473\_+624-Spg7 | chr8 | Spg7 | 0 | 0 | 0.180646022 | 625 | 625 |
| chr8\_124887819\_124884965\_+2854-Gnpat | chr8 | Gnpat | 0 | 0 | 0.180646022 | 2855 | 474 |
| chr8\_125088448\_125087454\_+994-Disc1 | chr8 | Disc1 | 0 | 0 | 0.180646022 | 995 | 995 |
| chr8\_125090442\_125087454\_+2988-Disc1 | chr8 | Disc1 | 0.405592706 | 0.729236718 | 0 | 2989 | 1065 |
| chr8\_125155110\_125087454\_+67656-Disc1 | chr8 | Disc1 | 0.608389058 | 0 | 0 | 67657 | 1728 |
| chr8\_125165181\_125087454\_+77727-Disc1 | chr8 | Disc1 | 0.202796353 | 0.182309179 | 0 | 77728 | 1917 |
| chr8\_127409707\_127378186\_+31521-Pard3 | chr8 | Pard3 | 0.202796353 | 0.364618359 | 0 | 31522 | 1030 |
| chr8\_127426753\_127405375\_+21378-Pard3 | chr8 | Pard3 | 0 | 0 | 0.180646022 | 21379 | 847 |
| chr8\_127460384\_127415570\_+44814-Pard3 | chr8 | Pard3 | 0 | 0 | 0.180646022 | 44815 | 571 |
| chr8\_128207761\_128199298\_-8463-LOC105243337 | chr8 | LOC105243337 | 0 | 0.182309179 | 0 | 8464 | 8464 |
| chr8\_13167965\_13167158\_+807-Lamp1 | chr8 | Lamp1 | 0 | 0.182309179 | 0 | 808 | 379 |
| chr8\_13281125\_13271590\_-9535-Dcun1d2 | chr8 | Dcun1d2 | 0 | 0 | 0.361292045 | 9536 | 517 |
| chr8\_13313956\_13303728\_+10228-Tmco3 | chr8 | Tmco3 | 0.608389058 | 0 | 0 | 10229 | 655 |
| chr8\_14954928\_14945280\_+9648-Arhgef10 | chr8 | Arhgef10 | 0 | 0.182309179 | 0 | 9649 | 480 |
| chr8\_14982435\_14979800\_+2635-Arhgef10 | chr8 | Arhgef10 | 0 | 0 | 0.361292045 | 2636 | 502 |
| chr8\_15070764\_15065694\_+5070-Myom2 | chr8 | Myom2 | 0 | 0 | 0.180646022 | 5071 | 546 |
| chr8\_15085314\_15063843\_+21471-Myom2 | chr8 | Myom2 | 1.41957447 | 0.911545897 | 0.903230112 | 21472 | 1527 |
| chr8\_15085314\_15065694\_+19620-Myom2 | chr8 | Myom2 | 0 | 0 | 0.180646022 | 19621 | 1409 |
| chr8\_15104188\_15083230\_+20958-Myom2 | chr8 | Myom2 | 0.202796353 | 0 | 0 | 20959 | 1005 |
| chr8\_22421450\_22414716\_+6734-Mrps31 | chr8 | Mrps31 | 0 | 0 | 1.083876134 | 6735 | 588 |
| chr8\_23095310\_23084719\_+10591-Ank1 | chr8 | Ank1 | 0.202796353 | 0 | 0 | 10592 | 978 |
| chr8\_23135834\_23131438\_+4396-Ank1 | chr8 | Ank1 | 0.202796353 | 0 | 0 | 4397 | 932 |
| chr8\_25177994\_25164389\_-13605-Tacc1 | chr8 | Tacc1 | 0.202796353 | 0 | 0 | 13606 | 753 |
| chr8\_25555774\_25555495\_+279-Fgfr1 | chr8 | Fgfr1 | 0 | 0.182309179 | 0 | 280 | 280 |
| chr8\_25555774\_25555508\_+266-Fgfr1 | chr8 | Fgfr1 | 0.608389058 | 0 | 0 | 267 | 267 |
| chr8\_25564484\_25555508\_+8976-Fgfr1 | chr8 | Fgfr1 | 0.202796353 | 0 | 0.722584089 | 8977 | 990 |
| chr8\_25594166\_25580316\_-13850-Letm2 | chr8 | Letm2 | 0.202796353 | 0 | 0 | 13851 | 1258 |
| chr8\_25649703\_25640577\_+9126-Whsc1l1 | chr8 | Whsc1l1 | 0.202796353 | 0.546927538 | 0 | 9127 | 984 |
| chr8\_25649703\_25640649\_+9054-Whsc1l1 | chr8 | Whsc1l1 | 0 | 0.182309179 | 0 | 9055 | 912 |
| chr8\_25659895\_25640577\_+19318-Whsc1l1 | chr8 | Whsc1l1 | 0 | 0.182309179 | 0 | 19319 | 1139 |
| chr8\_25663256\_25659741\_+3515-Whsc1l1 | chr8 | Whsc1l1 | 0.202796353 | 0 | 0.361292045 | 3516 | 671 |
| chr8\_25666156\_25640577\_+25579-Whsc1l1 | chr8 | Whsc1l1 | 0.811185411 | 0.729236718 | 0.541938067 | 25580 | 1782 |
| chr8\_25675742\_25640577\_+35165-na | chr8 | na | 0.101398176 | 0 | 0 | 35166 | 35166 |
| chr8\_25679994\_25666030\_+13964-Whsc1l1 | chr8 | Whsc1l1 | 0.405592706 | 0 | 0 | 13965 | 534 |
| chr8\_25741354\_25735745\_-5609-Ddhd2 | chr8 | Ddhd2 | 0 | 0.546927538 | 0 | 5610 | 527 |
| chr8\_25753173\_25727630\_-25543-Ddhd2 | chr8 | Ddhd2 | 0 | 0 | 0.180646022 | 25544 | 4022 |
| chr8\_25753173\_25736007\_-17166-Ddhd2 | chr8 | Ddhd2 | 0 | 0 | 0.180646022 | 17167 | 1434 |
| chr8\_26013555\_26007187\_-6368-Fnta | chr8 | Fnta | 0 | 0 | 1.083876134 | 6369 | 433 |
| chr8\_31236430\_31225802\_+10628-Fut10 | chr8 | Fut10 | 0.405592706 | 0 | 0 | 10629 | 10629 |
| chr8\_3198275\_3173480\_-24795-Insr | chr8 | Insr | 0.405592706 | 0 | 0 | 24796 | 1420 |
| chr8\_3258934\_3258383\_-551-Insr | chr8 | Insr | 2.027963528 | 1.823091794 | 0.541938067 | 552 | 552 |
| chr8\_33343692\_33342977\_-715-Wrn | chr8 | Wrn | 0 | 0.182309179 | 0 | 716 | 295 |
| chr8\_33353399\_33280772\_-72627-Wrn | chr8 | Wrn | 0.202796353 | 0 | 0 | 72628 | 2889 |
| chr8\_33611921\_33610655\_+1266-Ppp2cb | chr8 | Ppp2cb | 0.202796353 | 0 | 0.903230112 | 1267 | 384 |
| chr8\_33866404\_33862986\_-3418-Rbpms | chr8 | Rbpms | 0 | 0 | 0.090323011 | 3419 | 180 |
| chr8\_34140836\_33834304\_-306532-Dctn6 | chr8 | Dctn6 | 0.202796353 | 0 | 0 | 306533 | 306533 |
| chr8\_34873214\_34848582\_-24632-Tnks | chr8 | Tnks | 0.202796353 | 0 | 0 | 24633 | 1801 |
| chr8\_39071516\_39046515\_+25001-Tusc3 | chr8 | Tusc3 | 0 | 0 | 0.180646022 | 25002 | 570 |
| chr8\_40905727\_40904446\_+1281-Slc7a2 | chr8 | Slc7a2 | 0 | 0 | 0.180646022 | 1282 | 357 |
| chr8\_41041679\_41015388\_-26291-Mtus1 | chr8 | Mtus1 | 0 | 0.182309179 | 0 | 26292 | 489 |
| chr8\_41056684\_41048048\_-8636-Mtus1 | chr8 | Mtus1 | 0.405592706 | 0 | 0 | 8637 | 321 |
| chr8\_41084840\_41048048\_-36792-Mtus1 | chr8 | Mtus1 | 0.405592706 | 0 | 0 | 36793 | 2744 |
| chr8\_41084840\_41076232\_-8608-Mtus1 | chr8 | Mtus1 | 0.811185411 | 1.367318845 | 1.264522156 | 8609 | 2423 |
| chr8\_41084840\_41082614\_-2226-Mtus1 | chr8 | Mtus1 | 1.013981764 | 0.182309179 | 0.903230112 | 2227 | 2227 |
| chr8\_41092005\_41082614\_-9391-na | chr8 | na | 0 | 0.09115459 | 0 | 9392 | 9392 |
| chr8\_44953481\_44950196\_+3285-Fat1 | chr8 | Fat1 | 0 | 0 | 0.180646022 | 3286 | 3286 |
| chr8\_45775703\_45745420\_+30283-Sorbs2 | chr8 | Sorbs2 | 0 | 0 | 0.361292045 | 30284 | 1481 |
| chr8\_45775703\_45759053\_+16650-Sorbs2 | chr8 | Sorbs2 | 0 | 0 | 0.541938067 | 16651 | 714 |
| chr8\_45783626\_45745420\_+38206-Sorbs2 | chr8 | Sorbs2 | 0 | 0.364618359 | 0 | 38207 | 1724 |
| chr8\_45785325\_45759053\_+26272-Sorbs2 | chr8 | Sorbs2 | 0.202796353 | 0 | 0 | 26273 | 1014 |
| chr8\_45792968\_45770546\_+22422-Sorbs2 | chr8 | Sorbs2 | 0 | 0 | 0.180646022 | 22423 | 873 |
| chr8\_45801011\_45783543\_+17468-Sorbs2 | chr8 | Sorbs2 | 0 | 0 | 0.180646022 | 17469 | 2099 |
| chr8\_45805853\_45745420\_+60433-na | chr8 | na | 0.101398176 | 0 | 0 | 60434 | 60434 |
| chr8\_45986363\_45983523\_+2840-Ufsp2 | chr8 | Ufsp2 | 0 | 0.182309179 | 0 | 2841 | 2841 |
| chr8\_46493026\_46492800\_+226-Acsl1 | chr8 | Acsl1 | 0.405592706 | 0 | 0 | 227 | 227 |
| chr8\_46823995\_46793493\_+30502-Irf2 | chr8 | Irf2 | 0 | 0 | 0.180646022 | 30503 | 30503 |
| chr8\_46837838\_46793493\_+44345-Irf2 | chr8 | Irf2 | 0.202796353 | 0 | 0 | 44346 | 700 |
| chr8\_47513428\_47493239\_-20189-Trappc11 | chr8 | Trappc11 | 0.202796353 | 0 | 0 | 20190 | 1936 |
| chr8\_47514877\_47513283\_-1594-Trappc11 | chr8 | Trappc11 | 0.405592706 | 0 | 0 | 1595 | 454 |
| chr8\_47920698\_47899436\_-21262-Wwc2 | chr8 | Wwc2 | 0 | 0.364618359 | 0 | 21263 | 391 |
| chr8\_55111085\_55101811\_-9274-na | chr8 | na | 0 | 0 | 0.180646022 | 9275 | 9275 |
| chr8\_61054622\_61049784\_+4838-Nek1 | chr8 | Nek1 | 0.202796353 | 0 | 0 | 4839 | 399 |
| chr8\_61089799\_61054520\_+35279-Nek1 | chr8 | Nek1 | 0 | 0 | 0.180646022 | 35280 | 863 |
| chr8\_68000825\_67960387\_-40438-Psd3 | chr8 | Psd3 | 0 | 0 | 0.180646022 | 40439 | 1568 |
| chr8\_68121628\_68108661\_-12967-Psd3 | chr8 | Psd3 | 0.202796353 | 0 | 0 | 12968 | 12968 |
| chr8\_68158433\_68120748\_-37685-Psd3 | chr8 | Psd3 | 0 | 0.182309179 | 0 | 37686 | 37686 |
| chr8\_68162612\_68120748\_-41864-Psd3 | chr8 | Psd3 | 0 | 0.182309179 | 0 | 41865 | 928 |
| chr8\_68461851\_68460924\_-927-Csgalnact1 | chr8 | Csgalnact1 | 0.608389058 | 0 | 0 | 928 | 928 |
| chr8\_69798513\_69797225\_+1288-Atp13a1 | chr8 | Atp13a1 | 0.202796353 | 0 | 0 | 1289 | 420 |
| chr8\_69950754\_69935779\_-14975-Gatad2a | chr8 | Gatad2a | 0.202796353 | 0 | 0 | 14976 | 360 |
| chr8\_70252101\_70251614\_+487-Sugp2 | chr8 | Sugp2 | 0 | 0 | 0.180646022 | 488 | 488 |
| chr8\_70914994\_70911846\_+3148-Map1s | chr8 | Map1s | 0.202796353 | 0 | 0.180646022 | 3149 | 2651 |
| chr8\_71334394\_71327880\_+6514-Myo9b | chr8 | Myo9b | 0 | 0.182309179 | 0 | 6515 | 803 |
| chr8\_71339020\_71333254\_+5766-Myo9b | chr8 | Myo9b | 0.202796353 | 0 | 0 | 5767 | 648 |
| chr8\_72177670\_72168427\_+9243-Rab8a | chr8 | Rab8a | 0.405592706 | 0 | 0 | 9244 | 407 |
| chr8\_72400233\_72367904\_-32329-Eps15l1 | chr8 | Eps15l1 | 0 | 0 | 0.180646022 | 32330 | 6029 |
| chr8\_72400233\_72389408\_-10825-Eps15l1 | chr8 | Eps15l1 | 0.202796353 | 0 | 0 | 10826 | 525 |
| chr8\_72662444\_72653486\_+8958-Nwd1 | chr8 | Nwd1 | 0 | 0.182309179 | 0 | 8959 | 501 |
| chr8\_75030122\_75023998\_+6124-Hmgxb4 | chr8 | Hmgxb4 | 0 | 0 | 0.361292045 | 6125 | 427 |
| chr8\_77217585\_77085527\_+132058-Nr3c2 | chr8 | Nr3c2 | 0 | 0 | 0.180646022 | 132059 | 1030 |
| chr8\_77351672\_77310731\_-40941-Arhgap10 | chr8 | Arhgap10 | 1.216778117 | 0 | 0 | 40942 | 476 |
| chr8\_77351672\_77344640\_-7032-Arhgap10 | chr8 | Arhgap10 | 0 | 0.546927538 | 0.541938067 | 7033 | 325 |
| chr8\_77358634\_77310731\_-47903-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0 | 0 | 47904 | 564 |
| chr8\_77358634\_77344640\_-13994-Arhgap10 | chr8 | Arhgap10 | 1.216778117 | 0 | 0 | 13995 | 413 |
| chr8\_77365160\_77351614\_-13546-na | chr8 | na | 0.202796353 | 0 | 0 | 13547 | 13547 |
| chr8\_77365160\_77358547\_-6613-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0.182309179 | 0.180646022 | 6614 | 163 |
| chr8\_77411128\_77344640\_-66488-Arhgap10 | chr8 | Arhgap10 | 0 | 0 | 0.361292045 | 66489 | 884 |
| chr8\_77411128\_77382725\_-28403-Arhgap10 | chr8 | Arhgap10 | 1.013981764 | 1.640782614 | 2.34839829 | 28404 | 396 |
| chr8\_77411128\_77384751\_-26377-Arhgap10 | chr8 | Arhgap10 | 2.230759881 | 0.729236718 | 1.987106246 | 26378 | 330 |
| chr8\_77413627\_77344640\_-68987-Arhgap10 | chr8 | Arhgap10 | 0 | 0.364618359 | 0 | 68988 | 1014 |
| chr8\_77413627\_77382725\_-30902-Arhgap10 | chr8 | Arhgap10 | 0.405592706 | 0 | 0.180646022 | 30903 | 526 |
| chr8\_77420158\_77358547\_-61611-Arhgap10 | chr8 | Arhgap10 | 0 | 0 | 0.180646022 | 61612 | 776 |
| chr8\_77420747\_77382725\_-38022-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0 | 0 | 38023 | 742 |
| chr8\_77420747\_77384751\_-35996-Arhgap10 | chr8 | Arhgap10 | 0.405592706 | 0 | 0 | 35997 | 676 |
| chr8\_77420747\_77409548\_-11199-Arhgap10 | chr8 | Arhgap10 | 0 | 0.364618359 | 0 | 11200 | 548 |
| chr8\_77426431\_77409548\_-16883-Arhgap10 | chr8 | Arhgap10 | 0 | 0 | 0.180646022 | 16884 | 650 |
| chr8\_77432811\_77409548\_-23263-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0 | 0 | 23264 | 722 |
| chr8\_77450923\_77384751\_-66172-Arhgap10 | chr8 | Arhgap10 | 0.202796353 | 0 | 0 | 66173 | 1008 |
| chr8\_78578757\_78515586\_+63171-Slc10a7 | chr8 | Slc10a7 | 0 | 0.182309179 | 0 | 63172 | 335 |
| chr8\_78589249\_78578719\_+10530-Slc10a7 | chr8 | Slc10a7 | 0.101398176 | 0 | 0 | 10531 | 139 |
| chr8\_78706948\_78515586\_+191362-Slc10a7 | chr8 | Slc10a7 | 0 | 0.182309179 | 0 | 191363 | 847 |
| chr8\_79356469\_79343654\_-12815-Smad1 | chr8 | Smad1 | 0.202796353 | 0 | 0 | 12816 | 854 |
| chr8\_80800395\_80784627\_-15768-Gab1 | chr8 | Gab1 | 0.202796353 | 0 | 0 | 15769 | 1516 |
| chr8\_80800395\_80788490\_-11905-Gab1 | chr8 | Gab1 | 0.405592706 | 0 | 0 | 11906 | 1126 |
| chr8\_80800395\_80791389\_-9006-Gab1 | chr8 | Gab1 | 0 | 0 | 0.361292045 | 9007 | 521 |
| chr8\_81743814\_81676391\_+67423-Inpp4b | chr8 | Inpp4b | 0 | 0.364618359 | 0 | 67424 | 363 |
| chr8\_83042782\_82990347\_+52435-Rnf150 | chr8 | Rnf150 | 0.405592706 | 0 | 0 | 52436 | 753 |
| chr8\_83042782\_83036025\_+6757-Rnf150 | chr8 | Rnf150 | 0.202796353 | 0.364618359 | 0 | 6758 | 308 |
| chr8\_83590830\_83582397\_+8433-LOC105246804 | chr8 | LOC105246804 | 0 | 0.364618359 | 0 | 8434 | 368 |
| chr8\_83728211\_83728095\_-116-Adgre5 | chr8 | Adgre5 | 0.202796353 | 0 | 0 | 117 | 117 |
| chr8\_84727967\_84721643\_-6324-Nfix | chr8 | Nfix | 0.405592706 | 0 | 0 | 6325 | 695 |
| chr8\_84772315\_84762018\_-10297-Nfix | chr8 | Nfix | 0.304194529 | 0 | 0.451615056 | 10298 | 10298 |
| chr8\_84779275\_84771784\_-7491-Nfix | chr8 | Nfix | 0.202796353 | 0.273463769 | 0 | 7492 | 7492 |
| chr8\_85519622\_85509179\_+10443-Gpt2 | chr8 | Gpt2 | 0.202796353 | 0 | 0 | 10444 | 767 |
| chr8\_85553410\_85546513\_-6897-Dnaja2 | chr8 | Dnaja2 | 0.202796353 | 0.182309179 | 0.722584089 | 6898 | 636 |
| chr8\_85726290\_85722631\_-3659-Itfg1 | chr8 | Itfg1 | 0 | 0.182309179 | 0 | 3660 | 326 |
| chr8\_85879810\_85848674\_+31136-na | chr8 | na | 0 | 0.182309179 | 0 | 31137 | 31137 |
| chr8\_85879810\_85875634\_+4176-Phkb | chr8 | Phkb | 0.202796353 | 0.729236718 | 0.180646022 | 4177 | 329 |
| chr8\_85901957\_85896430\_+5527-Phkb | chr8 | Phkb | 0 | 0 | 0.180646022 | 5528 | 189 |
| chr8\_85922242\_85870152\_+52090-Phkb | chr8 | Phkb | 0.202796353 | 0 | 0 | 52091 | 52091 |
| chr8\_85967677\_85946052\_+21625-Phkb | chr8 | Phkb | 0.202796353 | 0 | 0 | 21626 | 21626 |
| chr8\_85970997\_85848674\_+122323-na | chr8 | na | 0.101398176 | 0 | 0.180646022 | 122324 | 122324 |
| chr8\_85970997\_85875634\_+95363-Phkb | chr8 | Phkb | 0.202796353 | 0 | 0 | 95364 | 1382 |
| chr8\_85970997\_85922127\_+48870-Phkb | chr8 | Phkb | 0 | 0 | 0.361292045 | 48871 | 864 |
| chr8\_85970997\_85940841\_+30156-Phkb | chr8 | Phkb | 0.405592706 | 0.364618359 | 0.361292045 | 30157 | 684 |
| chr8\_85970997\_85942192\_+28805-Phkb | chr8 | Phkb | 0.202796353 | 0 | 0 | 28806 | 588 |
| chr8\_86049819\_86011017\_+38802-Phkb | chr8 | Phkb | 0 | 0.182309179 | 0 | 38803 | 1437 |
| chr8\_86049819\_86016859\_+32960-Phkb | chr8 | Phkb | 0 | 0.364618359 | 0 | 32961 | 1287 |
| chr8\_8641256\_8639206\_-2050-Efnb2 | chr8 | Efnb2 | 0 | 0 | 0.180646022 | 2051 | 457 |
| chr8\_86673069\_86631386\_+41683-Lonp2 | chr8 | Lonp2 | 0.405592706 | 0.182309179 | 0.361292045 | 41684 | 1562 |
| chr8\_86673069\_86665691\_+7378-Lonp2 | chr8 | Lonp2 | 0 | 0.546927538 | 0.180646022 | 7379 | 412 |
| chr8\_88158265\_88156462\_+1803-Heatr3 | chr8 | Heatr3 | 0 | 0 | 0.090323011 | 1804 | 469 |
| chr8\_88723212\_88705226\_+17986-Cyld | chr8 | Cyld | 0 | 0.182309179 | 0 | 17987 | 1285 |
| chr8\_91006710\_90994460\_+12250-Chd9 | chr8 | Chd9 | 0 | 0.182309179 | 0 | 12251 | 1332 |
| chr8\_94286617\_94281271\_+5346-Nup93 | chr8 | Nup93 | 0 | 0.364618359 | 0 | 5347 | 192 |
| chr8\_95465710\_95455858\_-9852-Csnk2a2 | chr8 | Csnk2a2 | 0.202796353 | 0 | 0 | 9853 | 607 |
| chr8\_95749074\_95748259\_-815-Cnot1 | chr8 | Cnot1 | 0 | 0.182309179 | 0 | 816 | 372 |
| chr9\_100803354\_100776756\_+26598-Stag1 | chr9 | Stag1 | 0 | 0.182309179 | 0 | 26599 | 508 |
| chr9\_100866214\_100705153\_+161061-Stag1 | chr9 | Stag1 | 0 | 0 | 0.180646022 | 161062 | 1574 |
| chr9\_101124015\_101100571\_+23444-Msl2 | chr9 | Msl2 | 0 | 0.182309179 | 0 | 23445 | 23445 |
| chr9\_101148738\_101125023\_-23715-Ppp2r3a | chr9 | Ppp2r3a | 0 | 0.364618359 | 0 | 23716 | 698 |
| chr9\_101153874\_101125023\_-28851-Ppp2r3a | chr9 | Ppp2r3a | 0.405592706 | 0.364618359 | 1.264522156 | 28852 | 785 |
| chr9\_104126788\_104113462\_+13326-Acad11 | chr9 | Acad11 | 0.405592706 | 0 | 0 | 13327 | 814 |
| chr9\_104186789\_104182505\_-4284-Dnajc13 | chr9 | Dnajc13 | 0 | 0 | 0.180646022 | 4285 | 400 |
| chr9\_105467817\_105459660\_-8157-Atp2c1 | chr9 | Atp2c1 | 0 | 0 | 0.180646022 | 8158 | 414 |
| chr9\_105494597\_105431495\_-63102-Atp2c1 | chr9 | Atp2c1 | 0.202796353 | 0 | 0 | 63103 | 2025 |
| chr9\_106185318\_106180566\_+4752-Wdr82 | chr9 | Wdr82 | 0 | 0.182309179 | 0 | 4753 | 510 |
| chr9\_106186512\_106183616\_+2896-Wdr82 | chr9 | Wdr82 | 0.202796353 | 0 | 0.180646022 | 2897 | 586 |
| chr9\_106246978\_106243162\_-3816-Alas1 | chr9 | Alas1 | 0.202796353 | 0 | 0 | 3817 | 454 |
| chr9\_106830934\_106829061\_+1873-Vprbp | chr9 | Vprbp | 0 | 0.182309179 | 0 | 1874 | 195 |
| chr9\_106854294\_106844136\_+10158-Vprbp | chr9 | Vprbp | 0.202796353 | 0 | 0 | 10159 | 844 |
| chr9\_107592203\_107591568\_+635-Ifrd2 | chr9 | Ifrd2 | 0 | 0.182309179 | 0 | 636 | 267 |
| chr9\_107754182\_107746019\_-8163-Rbm5 | chr9 | Rbm5 | 0.202796353 | 0 | 0 | 8164 | 923 |
| chr9\_108374318\_108350910\_+23408-Usp4 | chr9 | Usp4 | 0.202796353 | 0 | 0 | 23409 | 1590 |
| chr9\_108489374\_108482881\_+6493-Lamb2 | chr9 | Lamb2 | 0 | 0.182309179 | 0 | 6494 | 3550 |
| chr9\_108544977\_108528589\_+16388-Qrich1 | chr9 | Qrich1 | 0.202796353 | 0.546927538 | 0.541938067 | 16389 | 1938 |
| chr9\_109979091\_109944884\_+34207-LOC102639109 | chr9 | LOC102639109 | 0.202796353 | 0 | 0 | 34208 | 34208 |
| chr9\_109979091\_109944884\_+34207-Map4 | chr9 | Map4 | 0 | 0 | 0.180646022 | 34208 | 34208 |
| chr9\_109999840\_109978850\_+20990-Map4 | chr9 | Map4 | 0.202796353 | 0.546927538 | 0 | 20991 | 311 |
| chr9\_110027792\_109978850\_+48942-Map4 | chr9 | Map4 | 0 | 0.182309179 | 0 | 48943 | 548 |
| chr9\_110036855\_109999772\_+37083-Map4 | chr9 | Map4 | 0 | 0 | 0.180646022 | 37084 | 1689 |
| chr9\_110040467\_109978850\_+61617-Map4 | chr9 | Map4 | 0 | 0.182309179 | 0.361292045 | 61618 | 61618 |
| chr9\_110040467\_110026101\_+14366-Map4 | chr9 | Map4 | 0 | 0 | 0.180646022 | 14367 | 14367 |
| chr9\_110043765\_109978850\_+64915-na | chr9 | na | 0 | 0.09115459 | 0 | 64916 | 64916 |
| chr9\_110068985\_110063017\_+5968-Map4 | chr9 | Map4 | 0.608389058 | 0 | 0.903230112 | 5969 | 866 |
| chr9\_110068985\_110067485\_+1500-Map4 | chr9 | Map4 | 0 | 0.364618359 | 0 | 1501 | 537 |
| chr9\_110072705\_110063017\_+9688-Map4 | chr9 | Map4 | 0.202796353 | 0 | 0 | 9689 | 1073 |
| chr9\_110098859\_110091419\_-7440-Dhx30 | chr9 | Dhx30 | 0 | 0 | 0.361292045 | 7441 | 815 |
| chr9\_110185936\_110182922\_+3014-Smarcc1 | chr9 | Smarcc1 | 0 | 0 | 0.180646022 | 3015 | 308 |
| chr9\_110310311\_110310072\_-239-na | chr9 | na | 0 | 0 | 0.361292045 | 240 | 240 |
| chr9\_110439058\_110436011\_-3047-Klhl18 | chr9 | Klhl18 | 0 | 0.182309179 | 0 | 3048 | 536 |
| chr9\_110553234\_110547209\_+6025-Setd2 | chr9 | Setd2 | 0 | 0.546927538 | 0 | 6026 | 4418 |
| chr9\_110574274\_110537362\_+36912-Setd2 | chr9 | Setd2 | 0.202796353 | 0 | 0 | 36913 | 36913 |
| chr9\_110574274\_110545276\_+28998-Setd2 | chr9 | Setd2 | 0.202796353 | 0 | 0 | 28999 | 5947 |
| chr9\_110574274\_110573612\_+662-Setd2 | chr9 | Setd2 | 0 | 0 | 0.361292045 | 663 | 663 |
| chr9\_110599253\_110571947\_+27306-Setd2 | chr9 | Setd2 | 0 | 0 | 0.180646022 | 27307 | 2035 |
| chr9\_110637685\_110636891\_-794-Nbeal2 | chr9 | Nbeal2 | 0 | 0.182309179 | 0 | 795 | 498 |
| chr9\_110970159\_110960802\_+9357-Lrrc2 | chr9 | Lrrc2 | 0 | 0 | 0.180646022 | 9358 | 648 |
| chr9\_110980963\_110979470\_+1493-Lrrc2 | chr9 | Lrrc2 | 0 | 0 | 0.180646022 | 1494 | 293 |
| chr9\_111180272\_111175777\_+4495-Lrrfip2 | chr9 | Lrrfip2 | 0 | 1.093855076 | 0 | 4496 | 342 |
| chr9\_111199835\_111182819\_+17016-Lrrfip2 | chr9 | Lrrfip2 | 0 | 0.273463769 | 0 | 17017 | 573 |
| chr9\_111205847\_111182819\_+23028-Lrrfip2 | chr9 | Lrrfip2 | 0.405592706 | 0 | 0.541938067 | 23029 | 666 |
| chr9\_111205847\_111182819\_+23028-na | chr9 | na | 0 | 0.182309179 | 0 | 23029 | 23029 |
| chr9\_111205847\_111184190\_+21657-Lrrfip2 | chr9 | Lrrfip2 | 0.608389058 | 1.093855076 | 1.083876134 | 21658 | 588 |
| chr9\_111205847\_111188762\_+17085-Lrrfip2 | chr9 | Lrrfip2 | 0.202796353 | 0.546927538 | 1.083876134 | 17086 | 498 |
| chr9\_113899599\_113889958\_+9641-Clasp2 | chr9 | Clasp2 | 1.013981764 | 1.458473435 | 0.180646022 | 9642 | 531 |
| chr9\_114459725\_114450597\_+9128-Glb1 | chr9 | Glb1 | 0.202796353 | 0 | 0 | 9129 | 414 |
| chr9\_115966323\_115937142\_+29181-Gadl1 | chr9 | Gadl1 | 0.202796353 | 0 | 0 | 29182 | 1013 |
| chr9\_117882102\_117881779\_-323-LOC108167721 | chr9 | LOC108167721 | 0.202796353 | 0 | 0 | 324 | 324 |
| chr9\_118534705\_118527010\_+7695-Golga4 | chr9 | Golga4 | 0.405592706 | 0 | 0.180646022 | 7696 | 516 |
| chr9\_119304917\_119284546\_-20371-Oxsr1 | chr9 | Oxsr1 | 0.405592706 | 0 | 0 | 20372 | 493 |
| chr9\_119916833\_119902286\_+14547-Wdr48 | chr9 | Wdr48 | 0.608389058 | 0 | 0 | 14548 | 1233 |
| chr9\_119918557\_119902286\_+16271-Wdr48 | chr9 | Wdr48 | 0.202796353 | 0 | 0 | 16272 | 1426 |
| chr9\_121319952\_121318105\_+1847-na | chr9 | na | 0 | 0 | 0.180646022 | 1848 | 1848 |
| chr9\_121431555\_121364001\_+67554-Trak1 | chr9 | Trak1 | 0 | 0 | 0.180646022 | 67555 | 632 |
| chr9\_121741743\_121728578\_+13165-Nktr | chr9 | Nktr | 0 | 0.182309179 | 0 | 13166 | 417 |
| chr9\_121745988\_121731478\_+14510-Nktr | chr9 | Nktr | 0 | 0.364618359 | 0 | 14511 | 731 |
| chr9\_122137601\_122131893\_+5708-Snrk | chr9 | Snrk | 0 | 0 | 5.058088625 | 5709 | 985 |
| chr9\_122157297\_122136906\_+20391-Snrk | chr9 | Snrk | 0 | 0 | 0.180646022 | 20392 | 838 |
| chr9\_122275663\_122201771\_-73892-Ano10 | chr9 | Ano10 | 0.405592706 | 0 | 0 | 73893 | 1928 |
| chr9\_122857638\_122856699\_-939-Zfp445 | chr9 | Zfp445 | 0.101398176 | 0 | 0 | 940 | 391 |
| chr9\_123395011\_123377701\_+17310-Lars2 | chr9 | Lars2 | 0 | 0.182309179 | 0 | 17311 | 282 |
| chr9\_123500232\_122157156\_+1343076-Kif15 | chr9 | Kif15 | 0 | 0 | 0.180646022 | 1343077 | 1343077 |
| chr9\_123500232\_123409614\_+90618-Lars2 | chr9 | Lars2 | 0.202796353 | 0 | 0 | 90619 | 90619 |
| chr9\_123591015\_123552767\_+38248-Sacm1l | chr9 | Sacm1l | 0 | 0.182309179 | 0 | 38249 | 1410 |
| chr9\_14575439\_14547690\_-27749-Amotl1 | chr9 | Amotl1 | 0.405592706 | 0 | 0.361292045 | 27750 | 1852 |
| chr9\_14596600\_14592754\_-3846-Amotl1 | chr9 | Amotl1 | 0.405592706 | 0.729236718 | 0 | 3847 | 1108 |
| chr9\_21205413\_21192395\_+13018-Pde4a | chr9 | Pde4a | 0 | 0 | 0.180646022 | 13019 | 1419 |
| chr9\_21660871\_21655627\_+5244-Smarca4 | chr9 | Smarca4 | 0 | 0.182309179 | 0 | 5245 | 437 |
| chr9\_22579593\_22567705\_+11888-Bbs9 | chr9 | Bbs9 | 0.811185411 | 0.182309179 | 0 | 11889 | 574 |
| chr9\_22659145\_22643745\_+15400-Bbs9 | chr9 | Bbs9 | 0.811185411 | 0.546927538 | 0.361292045 | 15401 | 460 |
| chr9\_22793933\_22643745\_+150188-Bbs9 | chr9 | Bbs9 | 0.202796353 | 0 | 0 | 150189 | 969 |
| chr9\_25125023\_25109440\_-15583-Herpud2 | chr9 | Herpud2 | 0.202796353 | 0 | 0 | 15584 | 714 |
| chr9\_31405657\_31394703\_+10954-Nfrkb | chr9 | Nfrkb | 0 | 0 | 0.180646022 | 10955 | 1756 |
| chr9\_32250787\_32246447\_+4340-Arhgap32 | chr9 | Arhgap32 | 0.405592706 | 0.182309179 | 0.180646022 | 4341 | 679 |
| chr9\_32476773\_32461251\_-15522-Fli1 | chr9 | Fli1 | 0 | 0 | 0.180646022 | 15523 | 571 |
| chr9\_3450151\_3441055\_+9096-Cwf19l2 | chr9 | Cwf19l2 | 0 | 0 | 0.361292045 | 9097 | 433 |
| chr9\_3460131\_3441055\_+19076-Cwf19l2 | chr9 | Cwf19l2 | 0.405592706 | 0.182309179 | 0 | 19077 | 1000 |
| chr9\_3477962\_3475483\_+2479-Cwf19l2 | chr9 | Cwf19l2 | 0 | 0.182309179 | 0 | 2480 | 248 |
| chr9\_34985144\_34983621\_-1523-Kirrel3os | chr9 | Kirrel3os | 0 | 0.182309179 | 0 | 1524 | 488 |
| chr9\_35210165\_35207479\_-2686-Foxred1 | chr9 | Foxred1 | 0.202796353 | 0 | 0 | 2687 | 910 |
| chr9\_36911263\_36909629\_-1634-Pknox2 | chr9 | Pknox2 | 0 | 0.364618359 | 0.180646022 | 1635 | 348 |
| chr9\_3759881\_3759396\_+485-Gucy1a2 | chr9 | Gucy1a2 | 0 | 0.364618359 | 0 | 486 | 486 |
| chr9\_42444588\_42437115\_-7473-Tbcel | chr9 | Tbcel | 0.202796353 | 0 | 0 | 7474 | 683 |
| chr9\_43008111\_43005544\_-2567-Arhgef12 | chr9 | Arhgef12 | 0 | 0.182309179 | 0 | 2568 | 306 |
| chr9\_43020783\_43008016\_-12767-Arhgef12 | chr9 | Arhgef12 | 0 | 0 | 0.180646022 | 12768 | 689 |
| chr9\_43027295\_42972185\_-55110-Arhgef12 | chr9 | Arhgef12 | 0.405592706 | 0 | 0 | 55111 | 3855 |
| chr9\_43496442\_43495825\_+617-na | chr9 | na | 0.202796353 | 0 | 0 | 618 | 618 |
| chr9\_44091322\_44089132\_+2190-Usp2 | chr9 | Usp2 | 0 | 0.729236718 | 0 | 2191 | 398 |
| chr9\_44816659\_44809064\_-7595-Kmt2a | chr9 | Kmt2a | 0.202796353 | 0 | 0 | 7596 | 808 |
| chr9\_44826959\_44824325\_-2634-Kmt2a | chr9 | Kmt2a | 0 | 0 | 0.361292045 | 2635 | 494 |
| chr9\_44829268\_44828784\_-484-Kmt2a | chr9 | Kmt2a | 0.202796353 | 0 | 0 | 485 | 298 |
| chr9\_44829271\_44828784\_-487-Kmt2a | chr9 | Kmt2a | 0.405592706 | 0.729236718 | 0 | 488 | 301 |
| chr9\_44830123\_44828784\_-1339-Kmt2a | chr9 | Kmt2a | 0 | 0.182309179 | 0 | 1340 | 375 |
| chr9\_45869544\_45866566\_-2978-Rnf214 | chr9 | Rnf214 | 0 | 0.182309179 | 0 | 2979 | 1634 |
| chr9\_45900256\_45869179\_-31077-Rnf214 | chr9 | Rnf214 | 0.405592706 | 0 | 0 | 31078 | 1228 |
| chr9\_45900256\_45890804\_-9452-Rnf214 | chr9 | Rnf214 | 0 | 0.182309179 | 0.180646022 | 9453 | 852 |
| chr9\_45911249\_45908528\_+2721-Pcsk7 | chr9 | Pcsk7 | 0 | 0.182309179 | 0 | 2722 | 902 |
| chr9\_47813945\_47787971\_+25974-Cadm1 | chr9 | Cadm1 | 0 | 0.182309179 | 0 | 25975 | 870 |
| chr9\_48743561\_48717283\_-26278-Zbtb16 | chr9 | Zbtb16 | 0.202796353 | 0 | 0 | 26279 | 185 |
| chr9\_48833099\_48717283\_-115816-Zbtb16 | chr9 | Zbtb16 | 0.202796353 | 0.182309179 | 0 | 115817 | 1542 |
| chr9\_48833099\_48743464\_-89635-Zbtb16 | chr9 | Zbtb16 | 0 | 0.364618359 | 0 | 89636 | 1455 |
| chr9\_48833099\_48831743\_-1356-Zbtb16 | chr9 | Zbtb16 | 0 | 0.182309179 | 0 | 1357 | 1357 |
| chr9\_49035960\_49023906\_+12054-Usp28 | chr9 | Usp28 | 0.202796353 | 0 | 0 | 12055 | 1570 |
| chr9\_50524779\_50504621\_-20158-Pts | chr9 | Pts | 0.202796353 | 0 | 0 | 20159 | 20159 |
| chr9\_50917652\_50917014\_-638-Sik2 | chr9 | Sik2 | 0 | 0 | 0.361292045 | 639 | 249 |
| chr9\_53209776\_53204059\_-5717-Ddx10 | chr9 | Ddx10 | 0.405592706 | 0 | 0 | 5718 | 649 |
| chr9\_53225635\_53204059\_-21576-Ddx10 | chr9 | Ddx10 | 0 | 0.182309179 | 0 | 21577 | 999 |
| chr9\_53453670\_53453353\_-317-Atm | chr9 | Atm | 0 | 0.182309179 | 0 | 318 | 222 |
| chr9\_53491040\_53441674\_-49366-Atm | chr9 | Atm | 0 | 0.182309179 | 0 | 49367 | 4750 |
| chr9\_54428123\_54423230\_-4893-Dmxl2 | chr9 | Dmxl2 | 0 | 0 | 0.180646022 | 4894 | 334 |
| chr9\_54900572\_54883897\_+16675-Ireb2 | chr9 | Ireb2 | 0.202796353 | 0 | 0 | 16676 | 1663 |
| chr9\_55602921\_55580207\_-22714-Scaper | chr9 | Scaper | 0 | 0.182309179 | 0.180646022 | 22715 | 541 |
| chr9\_55816809\_55807013\_-9796-Scaper | chr9 | Scaper | 0 | 0.182309179 | 0 | 9797 | 642 |
| chr9\_56260762\_56257527\_-3235-Peak1 | chr9 | Peak1 | 0 | 0 | 0.180646022 | 3236 | 3236 |
| chr9\_56488829\_56467358\_+21471-Hmg20a | chr9 | Hmg20a | 0.405592706 | 0 | 0 | 21472 | 908 |
| chr9\_57119187\_57117382\_+1805-Sin3a | chr9 | Sin3a | 0.202796353 | 0 | 0 | 1806 | 371 |
| chr9\_58651939\_58618663\_+33276-Nptn | chr9 | Nptn | 0.608389058 | 0.364618359 | 0 | 33277 | 1216 |
| chr9\_58652009\_58618663\_+33346-Nptn | chr9 | Nptn | 0.405592706 | 0.364618359 | 0.361292045 | 33347 | 1286 |
| chr9\_59313236\_59303489\_+9747-Adpgk | chr9 | Adpgk | 0.405592706 | 0.364618359 | 0.180646022 | 9748 | 381 |
| chr9\_59396611\_59394878\_-1733-Arih1 | chr9 | Arih1 | 0 | 0 | 0.180646022 | 1734 | 374 |
| chr9\_59405855\_59396351\_-9504-Arih1 | chr9 | Arih1 | 0.202796353 | 0.182309179 | 0 | 9505 | 450 |
| chr9\_59633604\_59632916\_+688-Parp6 | chr9 | Parp6 | 0 | 0 | 0.180646022 | 689 | 189 |
| chr9\_60854503\_60850130\_+4373-Uaca | chr9 | Uaca | 0.202796353 | 0.182309179 | 0.541938067 | 4374 | 366 |
| chr9\_62923655\_62919351\_-4304-Pias1 | chr9 | Pias1 | 0 | 0.182309179 | 0 | 4305 | 359 |
| chr9\_6293937\_6243233\_+50704-Pdgfd | chr9 | Pdgfd | 0.202796353 | 0 | 0 | 50705 | 50705 |
| chr9\_63343456\_63322203\_-21253-Map2k5 | chr9 | Map2k5 | 0 | 0 | 0.180646022 | 21254 | 293 |
| chr9\_63358060\_63338085\_-19975-Map2k5 | chr9 | Map2k5 | 0 | 0 | 0.361292045 | 19976 | 247 |
| chr9\_64330915\_64322402\_-8513-Dis3l | chr9 | Dis3l | 0 | 0.182309179 | 0 | 8514 | 701 |
| chr9\_64873139\_64857667\_+15472-Dennd4a | chr9 | Dennd4a | 0 | 0 | 0.180646022 | 15473 | 913 |
| chr9\_64910185\_64894398\_+15787-Dennd4a | chr9 | Dennd4a | 0 | 0 | 0.361292045 | 15788 | 2279 |
| chr9\_65045788\_65036969\_+8819-Dpp8 | chr9 | Dpp8 | 0 | 0 | 0.180646022 | 8820 | 729 |
| chr9\_65075888\_65034875\_+41013-Dpp8 | chr9 | Dpp8 | 0 | 0 | 0.180646022 | 41014 | 3215 |
| chr9\_65121920\_65113259\_+8661-Igdcc4 | chr9 | Igdcc4 | 0.202796353 | 0 | 0 | 8662 | 774 |
| chr9\_65441688\_65439530\_+2158-Mtfmt | chr9 | Mtfmt | 0 | 0.182309179 | 0 | 2159 | 302 |
| chr9\_65481968\_65475840\_+6128-Spg21 | chr9 | Spg21 | 0 | 0.182309179 | 0 | 6129 | 363 |
| chr9\_65697669\_65697032\_-637-Zfp609 | chr9 | Zfp609 | 0.202796353 | 0 | 0 | 638 | 393 |
| chr9\_65701188\_65698838\_-2350-Zfp609 | chr9 | Zfp609 | 0.202796353 | 0 | 0 | 2351 | 2351 |
| chr9\_66433844\_66399768\_+34076-Herc1 | chr9 | Herc1 | 0 | 0.182309179 | 0 | 34077 | 2401 |
| chr9\_66434598\_66416184\_+18414-Herc1 | chr9 | Herc1 | 0 | 0 | 0.180646022 | 18415 | 1717 |
| chr9\_66458425\_66450703\_+7722-Herc1 | chr9 | Herc1 | 0 | 0.182309179 | 0 | 7723 | 1485 |
| chr9\_66465581\_66450703\_+14878-Herc1 | chr9 | Herc1 | 1.216778117 | 0 | 0 | 14879 | 2354 |
| chr9\_66547955\_66540062\_-7893-Usp3 | chr9 | Usp3 | 0 | 0.182309179 | 0 | 7894 | 477 |
| chr9\_66566903\_66540062\_-26841-na | chr9 | na | 0 | 0 | 0.180646022 | 26842 | 26842 |
| chr9\_67047911\_67047786\_-125-Tpm1 | chr9 | Tpm1 | 0 | 0.182309179 | 0 | 126 | 126 |
| chr9\_67266923\_67261891\_-5032-Tln2 | chr9 | Tln2 | 0 | 0.364618359 | 0 | 5033 | 498 |
| chr9\_67397683\_67386557\_-11126-Tln2 | chr9 | Tln2 | 0 | 0.182309179 | 0 | 11127 | 824 |
| chr9\_67890389\_67876227\_+14162-Vps13c | chr9 | Vps13c | 0 | 0 | 0.361292045 | 14163 | 891 |
| chr9\_68665154\_68663345\_+1809-Rora | chr9 | Rora | 0 | 0 | 0.090323011 | 1810 | 1436 |
| chr9\_68677130\_68663345\_+13785-na | chr9 | na | 0.101398176 | 0 | 0 | 13786 | 13786 |
| chr9\_68677130\_68676649\_+481-na | chr9 | na | 0 | 0.364618359 | 0 | 482 | 482 |
| chr9\_68793029\_68733842\_+59187-9530091C08Rik | chr9 | 9530091C08Rik | 0.405592706 | 0 | 0 | 59188 | 59188 |
| chr9\_69417109\_69410112\_+6997-Ice2 | chr9 | Ice2 | 0 | 0 | 0.180646022 | 6998 | 1797 |
| chr9\_69999270\_69997081\_+2189-Bnip2 | chr9 | Bnip2 | 0 | 0 | 0.180646022 | 2190 | 354 |
| chr9\_70000945\_69999094\_+1851-Bnip2 | chr9 | Bnip2 | 0.608389058 | 0 | 0 | 1852 | 280 |
| chr9\_70327276\_70322392\_+4884-Myo1e | chr9 | Myo1e | 0.202796353 | 0 | 0 | 4885 | 400 |
| chr9\_70337809\_70324833\_+12976-Myo1e | chr9 | Myo1e | 0.202796353 | 0 | 0 | 12977 | 546 |
| chr9\_70443750\_70442272\_-1478-Rnf111 | chr9 | Rnf111 | 0 | 0 | 0.180646022 | 1479 | 502 |
| chr9\_70589117\_70579282\_+9835-Sltm | chr9 | Sltm | 0.202796353 | 0 | 0 | 9836 | 1795 |
| chr9\_70616906\_70607458\_-9448-Fam63b | chr9 | Fam63b | 0.405592706 | 0 | 0 | 9449 | 518 |
| chr9\_70644946\_70607458\_-37488-Fam63b | chr9 | Fam63b | 0.202796353 | 0 | 0 | 37489 | 921 |
| chr9\_72233329\_72230266\_-3063-Gm27188 | chr9 | Gm27188 | 0 | 0 | 0.180646022 | 3064 | 348 |
| chr9\_72593360\_72577039\_+16321-Rfx7 | chr9 | Rfx7 | 0 | 0 | 0.361292045 | 16322 | 240 |
| chr9\_72677531\_72669952\_+7579-Nedd4 | chr9 | Nedd4 | 0 | 0 | 0.180646022 | 7580 | 357 |
| chr9\_72686114\_72669952\_+16162-Nedd4 | chr9 | Nedd4 | 0.405592706 | 0.182309179 | 0 | 16163 | 411 |
| chr9\_72710539\_72709112\_+1427-Nedd4 | chr9 | Nedd4 | 0 | 0 | 0.180646022 | 1428 | 113 |
| chr9\_72726530\_72721301\_+5229-Nedd4 | chr9 | Nedd4 | 0 | 0.182309179 | 0 | 5230 | 469 |
| chr9\_73015429\_73010297\_+5132-Ccpg1 | chr9 | Ccpg1 | 0 | 0.09115459 | 0 | 5133 | 3616 |
| chr9\_73016275\_73007393\_+8882-na | chr9 | na | 0 | 0 | 0.090323011 | 8883 | 8883 |
| chr9\_75131208\_75116186\_+15022-Myo5a | chr9 | Myo5a | 0 | 0 | 0.180646022 | 15023 | 15023 |
| chr9\_75273720\_75251441\_+22279-Myo5c | chr9 | Myo5c | 0 | 0 | 0.180646022 | 22280 | 1640 |
| chr9\_77190737\_77138350\_-52387-Mlip | chr9 | Mlip | 0 | 0.182309179 | 0 | 52388 | 636 |
| chr9\_77190737\_77164765\_-25972-Mlip | chr9 | Mlip | 1.825167175 | 0.911545897 | 0 | 25973 | 429 |
| chr9\_77217048\_77164765\_-52283-Mlip | chr9 | Mlip | 0 | 0.364618359 | 0 | 52284 | 501 |
| chr9\_77217048\_77173959\_-43089-Mlip | chr9 | Mlip | 0 | 0 | 0.180646022 | 43090 | 372 |
| chr9\_77230954\_77164765\_-66189-Mlip | chr9 | Mlip | 1.013981764 | 0 | 0.541938067 | 66190 | 1971 |
| chr9\_77230954\_77181352\_-49602-Mlip | chr9 | Mlip | 0.608389058 | 0 | 0 | 49603 | 1797 |
| chr9\_77230954\_77216977\_-13977-Mlip | chr9 | Mlip | 3.041945292 | 2.91694687 | 3.793566469 | 13978 | 1542 |
| chr9\_77231029\_77216977\_-14052-Mlip | chr9 | Mlip | 0 | 0.364618359 | 1.083876134 | 14053 | 1617 |
| chr9\_78095998\_78095145\_-853-Fbxo9 | chr9 | Fbxo9 | 0 | 0.182309179 | 0 | 854 | 246 |
| chr9\_7827009\_7825615\_-1394-Birc2 | chr9 | Birc2 | 0.101398176 | 0.09115459 | 0.361292045 | 1395 | 128 |
| chr9\_78461037\_78457210\_+3827-Mto1 | chr9 | Mto1 | 0.202796353 | 0 | 0 | 3828 | 651 |
| chr9\_79820706\_79815840\_-4866-Filip1 | chr9 | Filip1 | 0.608389058 | 0.182309179 | 0.541938067 | 4867 | 2867 |
| chr9\_79820706\_79817898\_-2808-Filip1 | chr9 | Filip1 | 0 | 0.182309179 | 0 | 2809 | 2809 |
| chr9\_80103764\_80089849\_+13915-Senp6 | chr9 | Senp6 | 0 | 0 | 0.180646022 | 13916 | 401 |
| chr9\_80140906\_80126143\_+14763-Senp6 | chr9 | Senp6 | 0 | 0.182309179 | 0 | 14764 | 1058 |
| chr9\_80269722\_80262274\_+7448-Myo6 | chr9 | Myo6 | 0 | 0.182309179 | 0 | 7449 | 389 |
| chr9\_80276401\_80266126\_+10275-Myo6 | chr9 | Myo6 | 0 | 0 | 0.361292045 | 10276 | 531 |
| chr9\_80288216\_80281461\_+6755-Myo6 | chr9 | Myo6 | 0.405592706 | 0 | 0 | 6756 | 790 |
| chr9\_82945918\_82932846\_-13072-Phip | chr9 | Phip | 0 | 0.182309179 | 0 | 13073 | 383 |
| chr9\_82959851\_82926397\_-33454-Phip | chr9 | Phip | 0.202796353 | 0 | 0 | 33455 | 1335 |
| chr9\_83428948\_83423023\_-5925-Lca5 | chr9 | Lca5 | 0.405592706 | 0 | 0 | 5926 | 968 |
| chr9\_86448853\_86422841\_-26012-Ube2cbp | chr9 | Ube2cbp | 0.405592706 | 0.729236718 | 0.180646022 | 26013 | 673 |
| chr9\_88402268\_88398239\_-4029-Snx14 | chr9 | Snx14 | 0 | 0.364618359 | 0 | 4030 | 344 |
| chr9\_95495933\_95472043\_-23890-U2surp | chr9 | U2surp | 0 | 0.182309179 | 0 | 23891 | 2322 |
| chr9\_96006847\_95998216\_+8631-Xrn1 | chr9 | Xrn1 | 0 | 0 | 0.180646022 | 8632 | 771 |
| chr9\_96026933\_96017751\_+9182-Xrn1 | chr9 | Xrn1 | 0 | 0 | 0.361292045 | 9183 | 555 |
| chr9\_96232748\_96202131\_+30617-na | chr9 | na | 0 | 0 | 0.090323011 | 30618 | 30618 |
| chr9\_96232748\_96202131\_+30617-Tfdp2 | chr9 | Tfdp2 | 0.202796353 | 0 | 0 | 30618 | 230 |
| chr9\_96232748\_96223159\_+9589-na | chr9 | na | 0.405592706 | 0.09115459 | 0.361292045 | 9590 | 9590 |
| chr9\_96247088\_96202131\_+44957-Tfdp2 | chr9 | Tfdp2 | 0 | 0 | 0.270969033 | 44958 | 269 |
| chr9\_96345893\_96340303\_-5590-Atp1b3 | chr9 | Atp1b3 | 0 | 0.364618359 | 0 | 5591 | 321 |
| chr9\_96606196\_96580487\_-25709-Rasa2 | chr9 | Rasa2 | 0 | 0 | 0.361292045 | 25710 | 433 |
| chr9\_96752573\_96731292\_-21281-E030011O05Rik | chr9 | E030011O05Rik | 0 | 0.182309179 | 0 | 21282 | 21282 |
| chr9\_99281102\_99254255\_+26847-Cep70 | chr9 | Cep70 | 0 | 0 | 0.361292045 | 26848 | 1056 |
| chr9\_99487959\_99480570\_-7389-Armc8 | chr9 | Armc8 | 0 | 0 | 0.180646022 | 7390 | 471 |
| chr9\_99505732\_99502512\_-3220-Armc8 | chr9 | Armc8 | 0 | 0.182309179 | 0 | 3221 | 252 |
| chr9\_99537759\_99480570\_-57189-Armc8 | chr9 | Armc8 | 2.433556234 | 2.370019332 | 2.167752268 | 57190 | 2074 |
| chr9\_99537759\_99480613\_-57146-Armc8 | chr9 | Armc8 | 0.202796353 | 0.182309179 | 0 | 57147 | 2031 |
| chr9\_99537759\_99483100\_-54659-Armc8 | chr9 | Armc8 | 0.202796353 | 0.182309179 | 0 | 54660 | 1866 |
| chr9\_99537759\_99487864\_-49895-Armc8 | chr9 | Armc8 | 0.608389058 | 0 | 0 | 49896 | 1699 |
| chr9\_99537759\_99496151\_-41608-Armc8 | chr9 | Armc8 | 0.811185411 | 0.546927538 | 0.180646022 | 41609 | 1603 |
| chr9\_99537759\_99520487\_-17272-Armc8 | chr9 | Armc8 | 0 | 0.182309179 | 0 | 17273 | 1012 |
| chr9\_99537759\_99526891\_-10868-Armc8 | chr9 | Armc8 | 0.202796353 | 0 | 0 | 10869 | 654 |
| chrX\_100445407\_100424300\_-21107-Awat2 | chrX | Awat2 | 0.202796353 | 0.364618359 | 0.541938067 | 21108 | 287 |
| chrX\_100776481\_100771615\_+4866-Dlg3 | chrX | Dlg3 | 0 | 0 | 0.180646022 | 4867 | 1048 |
| chrX\_101215578\_101213572\_-2006-Snx12 | chrX | Snx12 | 0 | 0.182309179 | 0 | 2007 | 514 |
| chrX\_101664744\_101663359\_+1385-Ogt | chrX | Ogt | 0.202796353 | 0 | 0 | 1386 | 438 |
| chrX\_10202165\_10178271\_-23894-Rpgr | chrX | Rpgr | 0 | 0 | 0.361292045 | 23895 | 794 |
| chrX\_102532518\_102532077\_-441-Phka1 | chrX | Phka1 | 0 | 0.182309179 | 0 | 442 | 155 |
| chrX\_102541450\_102520754\_-20696-Phka1 | chrX | Phka1 | 0.202796353 | 0 | 0 | 20697 | 688 |
| chrX\_102559734\_102554884\_-4850-Phka1 | chrX | Phka1 | 0.202796353 | 0 | 0 | 4851 | 579 |
| chrX\_102559734\_102555526\_-4208-Phka1 | chrX | Phka1 | 0 | 0 | 0.180646022 | 4209 | 439 |
| chrX\_102569368\_102541112\_-28256-Phka1 | chrX | Phka1 | 0.202796353 | 0 | 0 | 28257 | 1104 |
| chrX\_102575074\_102569290\_-5784-Phka1 | chrX | Phka1 | 0 | 0.364618359 | 0 | 5785 | 334 |
| chrX\_102586211\_102586077\_-134-Phka1 | chrX | Phka1 | 0 | 0.364618359 | 0.180646022 | 135 | 135 |
| chrX\_102592705\_102554884\_-37821-Phka1 | chrX | Phka1 | 0 | 0 | 0.180646022 | 37822 | 1127 |
| chrX\_102625670\_102609042\_-16628-Phka1 | chrX | Phka1 | 0.202796353 | 0 | 0 | 16629 | 587 |
| chrX\_105846795\_105839841\_-6954-Atrx | chrX | Atrx | 0.202796353 | 0 | 0 | 6955 | 573 |
| chrX\_108805597\_108803982\_-1615-Brwd3 | chrX | Brwd3 | 0 | 0.546927538 | 0 | 1616 | 383 |
| chrX\_109488775\_109483755\_+5020-Gm34521 | chrX | Gm34521 | 0 | 0.182309179 | 0 | 5021 | 5021 |
| chrX\_113140786\_113110176\_-30610-Chm | chrX | Chm | 0 | 0.182309179 | 0 | 30611 | 1077 |
| chrX\_11384033\_11375796\_-8237-na | chrX | na | 0 | 0 | 0.180646022 | 8238 | 8238 |
| chrX\_12061646\_12046856\_-14790-Bcor | chrX | Bcor | 0.202796353 | 0 | 0 | 14791 | 4479 |
| chrX\_12744828\_12683978\_-60850-Med14 | chrX | Med14 | 0 | 0 | 0.361292045 | 60851 | 2796 |
| chrX\_129966630\_129902900\_+63730-Diaph2 | chrX | Diaph2 | 0 | 0 | 0.541938067 | 63731 | 1167 |
| chrX\_133681408\_133625269\_-56139-Pcdh19 | chrX | Pcdh19 | 0 | 0 | 0.180646022 | 56140 | 560 |
| chrX\_133682188\_133625269\_-56919-Pcdh19 | chrX | Pcdh19 | 0 | 0.182309179 | 0 | 56920 | 657 |
| chrX\_134267561\_134261577\_-5984-Trmt2b | chrX | Trmt2b | 0.811185411 | 0.364618359 | 0.180646022 | 5985 | 592 |
| chrX\_139968599\_139968196\_-403-Rbm41 | chrX | Rbm41 | 0.202796353 | 0 | 0 | 404 | 404 |
| chrX\_139995228\_139954907\_-40321-Rbm41 | chrX | Rbm41 | 0 | 0 | 0.090323011 | 40322 | 1139 |
| chrX\_139995228\_139991516\_-3712-Rbm41 | chrX | Rbm41 | 0 | 0 | 0.361292045 | 3713 | 587 |
| chrX\_140738468\_140736124\_+2344-Mid2 | chrX | Mid2 | 0 | 0 | 0.541938067 | 2345 | 2345 |
| chrX\_144349419\_144346682\_+2737-Alg13 | chrX | Alg13 | 0 | 0.364618359 | 0 | 2738 | 294 |
| chrX\_145497051\_145471418\_-25633-Amot | chrX | Amot | 0.202796353 | 0 | 0 | 25634 | 1987 |
| chrX\_145497051\_145471418\_-25633-na | chrX | na | 0 | 0.09115459 | 0 | 25634 | 25634 |
| chrX\_150926196\_150895956\_-30240-Gm8424 | chrX | Gm8424 | 0 | 0 | 0.180646022 | 30241 | 30241 |
| chrX\_151211030\_151198022\_+13008-Wnk3 | chrX | Wnk3 | 0 | 0.182309179 | 0 | 13009 | 1204 |
| chrX\_151405755\_151399675\_+6080-Fam120c | chrX | Fam120c | 0.405592706 | 0.182309179 | 0 | 6081 | 250 |
| chrX\_151573516\_151565372\_+8144-Phf8 | chrX | Phf8 | 0 | 0 | 0.361292045 | 8145 | 784 |
| chrX\_152029398\_152022746\_+6652-Smc1a | chrX | Smc1a | 0 | 0.182309179 | 0 | 6653 | 1436 |
| chrX\_152047968\_152046660\_+1308-Smc1a | chrX | Smc1a | 0 | 0.182309179 | 0 | 1309 | 411 |
| chrX\_157555691\_157554883\_-808-Mbtps2 | chrX | Mbtps2 | 0 | 0.182309179 | 0 | 809 | 291 |
| chrX\_157561501\_157548946\_-12555-Mbtps2 | chrX | Mbtps2 | 0 | 0.09115459 | 0 | 12556 | 2872 |
| chrX\_157561501\_157550932\_-10569-Mbtps2 | chrX | Mbtps2 | 0.202796353 | 0 | 0 | 10570 | 886 |
| chrX\_157721079\_157714587\_+6492-Smpx | chrX | Smpx | 0 | 0 | 0.180646022 | 6493 | 236 |
| chrX\_159328477\_159311464\_+17013-Rps6ka3 | chrX | Rps6ka3 | 0 | 0 | 0.361292045 | 17014 | 467 |
| chrX\_160590356\_160586744\_-3612-na | chrX | na | 0.202796353 | 0 | 0 | 3613 | 3613 |
| chrX\_163011206\_162975183\_+36023-Ctps2 | chrX | Ctps2 | 0.202796353 | 0 | 0 | 36024 | 395 |
| chrX\_163950225\_163943100\_-7125-Zrsr2 | chrX | Zrsr2 | 0 | 0.182309179 | 0 | 7126 | 372 |
| chrX\_168671890\_168668631\_-3259-Msl3 | chrX | Msl3 | 0.202796353 | 0 | 0 | 3260 | 576 |
| chrX\_168899786\_168896314\_+3472-na | chrX | na | 0 | 0 | 0.361292045 | 3473 | 3473 |
| chrX\_20188920\_20158815\_-30105-Slc9a7 | chrX | Slc9a7 | 0 | 0 | 0.180646022 | 30106 | 1013 |
| chrX\_23813223\_23732318\_+80905-Wdr44 | chrX | Wdr44 | 0 | 0 | 0.361292045 | 80906 | 80906 |
| chrX\_38442140\_38402062\_-40078-Lamp2 | chrX | Lamp2 | 0 | 0.182309179 | 0 | 40079 | 1273 |
| chrX\_38442140\_38421676\_-20464-Lamp2 | chrX | Lamp2 | 0 | 0.182309179 | 0 | 20465 | 1229 |
| chrX\_38442140\_38424267\_-17873-Lamp2 | chrX | Lamp2 | 0 | 0.729236718 | 0 | 17874 | 1053 |
| chrX\_38442140\_38430918\_-11222-Lamp2 | chrX | Lamp2 | 0.202796353 | 0 | 0 | 11223 | 824 |
| chrX\_42381050\_42372894\_+8156-B230118I11Rik | chrX | B230118I11Rik | 0 | 0.364618359 | 0 | 8157 | 8157 |
| chrX\_47861388\_47841537\_-19851-Smarca1 | chrX | Smarca1 | 0 | 0 | 0.180646022 | 19852 | 1239 |
| chrX\_47883676\_47849916\_-33760-Smarca1 | chrX | Smarca1 | 0 | 0.182309179 | 0 | 33761 | 1753 |
| chrX\_47884203\_47841537\_-42666-Smarca1 | chrX | Smarca1 | 0 | 0.182309179 | 0 | 42667 | 2145 |
| chrX\_47938410\_47930371\_+8039-Ocrl | chrX | Ocrl | 0.608389058 | 0 | 0 | 8040 | 1115 |
| chrX\_47943641\_47930371\_+13270-Ocrl | chrX | Ocrl | 0 | 0.182309179 | 0 | 13271 | 1361 |
| chrX\_47948360\_47930371\_+17989-Ocrl | chrX | Ocrl | 0.811185411 | 0 | 0.361292045 | 17990 | 1874 |
| chrX\_48371032\_48367419\_+3613-Bcorl1 | chrX | Bcorl1 | 0.101398176 | 0 | 0.090323011 | 3614 | 3355 |
| chrX\_48567113\_48558269\_-8844-Zfp280c | chrX | Zfp280c | 0.405592706 | 0.182309179 | 0 | 8845 | 902 |
| chrX\_49062349\_49051732\_-10617-Enox2 | chrX | Enox2 | 0.202796353 | 0 | 0.361292045 | 10618 | 761 |
| chrX\_49168784\_49168641\_-143-Enox2 | chrX | Enox2 | 0 | 0.182309179 | 0 | 144 | 144 |
| chrX\_52953578\_52916553\_+37025-Phf6 | chrX | Phf6 | 0.202796353 | 0 | 0 | 37026 | 1141 |
| chrX\_53008718\_52997030\_+11688-Hprt | chrX | Hprt | 0 | 0.182309179 | 0 | 11689 | 11689 |
| chrX\_56501895\_56496516\_+5379-Ddx26b | chrX | Ddx26b | 0.202796353 | 0 | 0 | 5380 | 721 |
| chrX\_61186174\_61183248\_+2926-na | chrX | na | 0 | 0 | 0.180646022 | 2927 | 2927 |
| chrX\_71401934\_71383200\_+18734-Mtmr1 | chrX | Mtmr1 | 0.405592706 | 0 | 0 | 18735 | 1197 |
| chrX\_71911120\_71843056\_+68064-na | chrX | na | 0.101398176 | 0 | 0 | 68065 | 68065 |
| chrX\_74276556\_74274106\_-2450-Dnase1l1 | chrX | Dnase1l1 | 0 | 0.364618359 | 0 | 2451 | 292 |
| chrX\_74276734\_74274106\_-2628-Dnase1l1 | chrX | Dnase1l1 | 0 | 0 | 0.541938067 | 2629 | 381 |
| chrX\_74311417\_74311077\_-340-na | chrX | na | 0.202796353 | 0 | 0 | 341 | 341 |
| chrX\_75033474\_75024778\_-8696-Gab3 | chrX | Gab3 | 0 | 0 | 0.180646022 | 8697 | 1000 |
| chrX\_83136689\_83043360\_+93329-Dmd | chrX | Dmd | 0 | 0.182309179 | 0 | 93330 | 93330 |
| chrX\_83321586\_83304176\_+17410-na | chrX | na | 0 | 0.364618359 | 0 | 17411 | 17411 |
| chrX\_83489945\_83346262\_+143683-Dmd | chrX | Dmd | 0 | 0 | 0.361292045 | 143684 | 556 |
| chrX\_83855867\_83627262\_+228605-Dmd | chrX | Dmd | 0 | 0.182309179 | 0 | 228606 | 3590 |
| chrX\_83964841\_83954963\_+9878-Dmd | chrX | Dmd | 0 | 0.364618359 | 0 | 9879 | 368 |
| chrX\_83964841\_83964669\_+172-Dmd | chrX | Dmd | 0 | 0.182309179 | 0 | 173 | 173 |
| chrX\_84312626\_84076517\_+236109-Dmd | chrX | Dmd | 0 | 0 | 0.180646022 | 236110 | 236110 |
| chrX\_84312626\_84271952\_+40674-Dmd | chrX | Dmd | 0.811185411 | 0.364618359 | 0.541938067 | 40675 | 468 |
| chrX\_84373547\_84309799\_+63748-Dmd | chrX | Dmd | 0 | 0 | 0.180646022 | 63749 | 457 |
| chrX\_84431992\_84271952\_+160040-Dmd | chrX | Dmd | 0 | 0 | 0.180646022 | 160041 | 844 |
| chrX\_84431992\_84425708\_+6284-Dmd | chrX | Dmd | 0 | 0 | 0.180646022 | 6285 | 211 |
| chrX\_84474366\_84425708\_+48658-Dmd | chrX | Dmd | 0 | 0.182309179 | 0 | 48659 | 444 |
| chrX\_85110100\_85105144\_+4956-Dmd | chrX | Dmd | 0.202796353 | 0 | 0 | 4957 | 446 |
| chrX\_95131015\_95051999\_-79016-Arhgef9 | chrX | Arhgef9 | 0.405592706 | 0 | 0 | 79017 | 1623 |
| chrX\_95955211\_95946411\_-8800-Las1l | chrX | Las1l | 0.202796353 | 0 | 0 | 8801 | 1083 |
| chrY\_1158634\_1129870\_-28764-Uty | chrY | Uty | 0.202796353 | 0 | 0.180646022 | 28765 | 2477 |
| chrY\_1341880\_1298961\_-42919-Usp9y | chrY | Usp9y | 0 | 0.182309179 | 0 | 42920 | 3693 |
| chrY\_1454684\_1412418\_-42266-Usp9y | chrY | Usp9y | 0 | 0.182309179 | 0 | 42267 | 1539 |