

SUPPLEMENTARY TABLES

Supplementary Table 1. Primer sequence of inserted fragment aiming at target genes.

| Identifier | Sequence |
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| shRNA forward primer | 5'-TGAAC TCGAGAAGGTATATTGCTGTTGACAGTGAGCG-3' |
| shRNA reverse primer | 5'-TCTCGAATTCTAGCCCCTTGAAGTCCGAGGCAGTAGGC-3' |
| Template Rac1 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGACAAGTTTTTGTACAGATTAATAGTGAAGCCAC AGATGTATTAATCTGTAACAAAACTTGGTGCCTACTGCCTCGGA-3' |
| Template Rac1 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCCAGACAGTATTTTACTAATATAGTGAAGCCAC AGATGTATATTAGTCAAATACTGTCTGTTGCCTACTGCCTCGGA-3' |
| Template P22 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGTGGAGCGGTGTGGACAGAAGTATAGTGAAGCCA CAGATGTATACTTCTGTCCACATCGCTCCATGCCTACTGCCTCGGA-3' |
| Template P22 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGTGGTGTATGCCACTGTAATAAATAGTGAAGCCAC AGATGTATTTATTACAGTGAGCAACACCATGCCTACTGCCTCGGA-3' |
| Template P47 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGACGAGATCTACGAGTTCATAATAGTGAAGCCACA GATGTATTATGGAAC TCGTAGATCTCGGTGCCTACTGCCTCGGA-3' |
| Template P47 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCACGCAGGTGAACCGTATGTAATAGTGAAGCCACA GATGTATTACATACGGTTCACCTGCGTATGCCTACTGCCTCGGA-3' |
| Template P67 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCTCGGAACATGGTGTCTAAGAATAGTGAAGCCACA GATGTATTCTTAGACACCATGTTCCGAATGCCTACTGCCTCGGA-3' |
| Template P67 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGTCAGGAAGATACCTCCCTGGAATAGTGAAGCCACA GATGTATTCTGGAGAGGTATCTTCCCTGGTGCCTACTGCCTCGGA-3' |
| Template Vegfa shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCTAGAGAATTCTACATACTAAATAGTGAAGCCACA GATGTATTTAGTATGTAGAATTCTCTATTGCCTACTGCCTCGGA-3' |
| Template Vegfa shRNA 2 | 5'-TGCTGTTGACAGTGAGCGACAACCTTGTGTTTGTATATAAATAGTGAAGCCACA GATGTATTTATATACAAACACAAGTTGCTGCCTACTGCCTCGGA-3' |
| Template Ctgf shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCACAGTTATCTAAGTTAATTTATAGTGAAGCCACA GATGTATAAATTAAC TTAGATAACTGTATGCCTACTGCCTCGGA-3' |
| Template Ctgf shRNA 2 | 5'-TGCTGTTGACAGTGAGCGAACCTTTCTAGTTGAAAATAAATAGTGAAGCCACA GATGTATTTATTTTCAACTAGAAAGGTGTGCCTACTGCCTCGGA-3' |
| Template Mmp2 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGATGGTGAGATCTTCTTCTTCAATAGTGAAGCCACA GATGTATTGAAGAAGAAGATCTCACCACTGCCTACTGCCTCGGA-3' |
| Template Mmp2 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGAACCTGGTACTTCAGATTTAATAGTGAAGCCACA GATGTATTAATCTGAAGTCACCAGGTGTGCCTACTGCCTCGGA-3' |
| Template Ccl2 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCTCCAAGGTATTGTTTAAAATATAGTGAAGCCACA GATGTATATTTTAAACAATACCTTGAATGCCTACTGCCTCGGA-3' |
| Template Ccl2 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCACCACTCAAGCACTTCTGTATAGTGAAGCCACA GATGTATACAGAAGTGCTTGAGGTGGTTTGCCTACTGCCTCGGA-3' |
| Template Tgfb2 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGAAAGCTTGTGTTCTGTTTGTATAGTGAAGCCACAG ATGTATAACAAACAGAACACAAGCTTGTGCCTACTGCCTCGGA-3' |
| Template Tgfb2 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCAGCTTGTGTTCTGTTTGTTAATAGTGAAGCCACAG ATGTATTAACAAACAGAACACAAGCTTGTGCCTACTGCCTCGGA-3' |
| Template Tgfb3 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCCAGAATCTTTGTATAAATAAATAGTGAAGCCACA GATGTATTTATTTATACAAAGATTCTGATGCCTACTGCCTCGGA-3' |
| Template Tgfb3 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGACACGGTGTGACTATAACAATAGTGAAGCCACA GATGTATTGTATAGTCCAAGCACCGTGTGCCTACTGCCTCGGA-3' |
| Template Edn1 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCACCGAGCACATTGACTACAGATAGTGAAGCCACA |

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|------------------------|--|
| | GATGTATCTGTAGTCAATGTGCTCGGTTTGCCTACTGCCTCGGA-3' |
| Template Edn1 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGGCCAAAGTACCATGCAGAAAGTAGTGAAGCCAC AGATGTATTTTCTGCATGGTACTTTGGGCTGCCTACTGCCTCGGA-3' |
| Template GAS6 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGACCGTGATTAGACTACGCTTCATAGTGAAGCCACA GATGTATGAAGCGTAGTCTAATCACGGGTGCCTACTGCCTCGGA-3' |
| Template GAS6 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGACCACTCCACAAAGAAGCTCAATAGTGAAGCCAC AGATGTATTGAGCTTCTTTGTAGAGTGGTTGCCTACTGCCTCGGA-3' |
| Template CXCL1 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGCTCAAAGGACTGTTACAAATGATAGTGAAGCCACA GATGTATCATTGTAACAGTCCTTTGAATGCCTACTGCCTCGGA-3' |
| Template CXCL1 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCAGGACTGTTACAAATGAAATATAGTGAAGCCACA GATGTATACTTCATTGTAACAGTCCTTTGCCTACTGCCTCGGA-3' |
| Template Thbs1 shRNA 1 | 5'-TGCTGTTGACAGTGAGCGAACCCTATCTATGACAAAACCTATAGTGAAGCCACA GATGTATAGGTTTTGTCATAGATGGGTCTGCCTACTGCCTCGGA-3' |
| Template Thbs1 shRNA 2 | 5'-TGCTGTTGACAGTGAGCGCTACGAGTGCCGAGACTCCTAATAGTGAAGCCACA GATGTATTAGGAATCTCGACACTCGTATTGCCTACTGCCTCGGA-3' |

Note: Sense shRNA and antisense shRNA sequences are underlined.

Supplementary Table 2. Primer sequence of target genes for qPCR experiments.

| Gene symbol | Forward primer sequence | Reverse primer sequence |
|--------------------|--------------------------------|----------------------------------|
| Rac1 | 5'-ACATCCCCACCGTCTTTGAC-3' | 5'-ACCACATGTGTCTCCAAGTGT-3' |
| P22 | 5'-CCTCCACTTACTGCTGTCCG-3' | 5'-AATGGGAGTCCACTGCTCAC-3' |
| P47 | 5'-AGAAACGCTTCGTCCCCAG-3' | 5'-TCCTTTAACATTTTATGGAAGTCTGT-3' |
| P67 | 5'-CTGAGCAGGCCTTCACCAA-3' | 5'-GCCTTCCTACCCACAGAAGC-3' |
| Vegfa | 5'-TGGAGCGTATGTGACAAGCC-3' | 5'-TTCTGTGACGGTGACGATG-3' |
| Ctgf | 5'-CCCTAGCTGCCTACCGACT-3' | 5'-TTGGTAACCCGGTGGAGAT-3' |
| Mmp2 | 5'-TCCCCACGAAGCCTTGTTA-3' | 5'-TCATAATCCTCGGTGGTGCC-3' |
| Ccl2 | 5'-AGAAACCAGCCAACTCTCACT-3' | 5'-GCATTAAGTGCATCTGGCTGAG-3' |
| Tgfb2 | 5'-CTCTGTGGGTACCTTGATGCC-3' | 5'-GCAAGCGAAAGACCCTGAAC-3' |
| Tgfb3 | 5'-ACACAGCGCAGTGAGTTCAT-3' | 5'-TGTGTGAACCCAGGAACGAG-3' |
| Edn1 | 5'-AGCCCTTCTAGGTCTAAGCGA-3' | 5'-CATGGTACTTTGGGCTCGGA-3' |
| GAS6 | 5'-GGATGGTACCAAGGGCCAGA-3' | 5'-AGTCACTTGTACATCTGGCAGG-3' |
| CXCL1 | 5'-CCGAAGTCATAGCCCACTCA-3' | 5'-ACGCCATCGGTGCAATCTAT-3' |
| Thbs1 | 5'-CGAGTCGCAAAGGGAGATGT-3' | 5'-ACGTTGGTTGAACTGGAGCA-3' |
| GAPDH | 5'-GACATGCCGCTGGAGAAAC-3' | 5'-AGCCCAGGATGCCCTTTAGT-3' |