

SUPPLEMENTARY TABLES

Supplementary Table 1. List of the top 100 ADAR-related genes from GEPIA2.0.

Gene symbol	Gene ID	PCC
ISG20L2	ENSG00000143319.16	0.75
YY1AP1	ENSG00000163374.19	0.74
SMG7	ENSG00000116698.20	0.72
EIF2AK2	ENSG00000055332.16	0.7
UBAP2L	ENSG00000143569.18	0.7
ATF6	ENSG00000118217.5	0.7
PIP5K1A	ENSG00000143398.19	0.7
CEP350	ENSG00000135837.15	0.69
UHMK1	ENSG00000152332.15	0.68
RAB3GAP2	ENSG00000118873.15	0.68
TAF5L	ENSG00000135801.9	0.67
COPA	ENSG00000122218.14	0.67
RPRD2	ENSG00000163125.15	0.67
GATAD2B	ENSG00000143614.7	0.67
RBM12	ENSG00000244462.7	0.67
WDR26	ENSG00000162923.14	0.67
ADNP	ENSG00000101126.15	0.67
TROVE2	ENSG00000116747.12	0.67
EXOC8	ENSG00000116903.7	0.67
HNRNPU	ENSG00000153187.16	0.66
AHCTF1	ENSG00000153207.14	0.66
UBE2Q1	ENSG00000160714.9	0.66
DIEXF	ENSG00000117597.17	0.66
ARNT	ENSG00000143437.20	0.66
SPRTN	ENSG00000010072.15	0.66
RBM12B	ENSG00000183808.11	0.65
ACBD3	ENSG00000182827.8	0.65
ARID4B	ENSG00000054267.20	0.65
RBBP5	ENSG00000117222.13	0.65
TRIP12	ENSG00000153827.13	0.65
PRRC2C	ENSG00000117523.15	0.65
BLZF1	ENSG00000117475.13	0.64
ASH1L	ENSG00000116539.10	0.64
SDE2	ENSG00000143751.9	0.64
POLR3C	ENSG00000186141.8	0.64
SP3	ENSG00000172845.13	0.64
TPM3	ENSG00000143549.19	0.64
URB2	ENSG00000135763.9	0.64
SCYL3	ENSG00000000457.13	0.64
HEATR1	ENSG00000119285.10	0.64
GOSR1	ENSG00000108587.14	0.63
POGK	ENSG00000143157.11	0.63
ETV3	ENSG00000117036.11	0.63
DTX3L	ENSG00000163840.9	0.63
USP37	ENSG00000135913.10	0.63
DEDD	ENSG00000158796.16	0.63
BROX	ENSG00000162819.11	0.63
BCLAF1	ENSG00000029363.15	0.63
THRAP3	ENSG00000054118.13	0.63
TRMT1L	ENSG00000121486.11	0.63
ANGEL2	ENSG00000174606.12	0.63
DDX46	ENSG00000145833.15	0.62

ZNFX1	ENSG00000124201.14	0.62
UHRF1BP1	ENSG00000065060.16	0.62
NSD1	ENSG00000165671.18	0.62
PRUNE	ENSG00000143363.15	0.62
TSNAX	ENSG00000116918.13	0.62
SNX27	ENSG00000143376.12	0.62
ZNF669	ENSG00000188295.14	0.62
ZMYM4	ENSG00000146463.11	0.62
ZNF281	ENSG00000162702.7	0.62
OTUD7B	ENSG00000264522.5	0.62
ZNF623	ENSG00000183309.11	0.62
NUP153	ENSG00000124789.11	0.62
FAM20B	ENSG00000116199.11	0.62
HNRNPK	ENSG00000165119.18	0.61
UBN1	ENSG00000118900.14	0.61
GTF3C4	ENSG00000125484.11	0.61
CNOT6	ENSG00000113300.11	0.61
RBM27	ENSG00000091009.7	0.61
ZSCAN29	ENSG00000140265.12	0.61
METTL14	ENSG00000145388.14	0.61
SENP1	ENSG00000079387.13	0.61
CELF1	ENSG00000149187.17	0.61
RFX5	ENSG00000143390.17	0.61
IARS2	ENSG00000067704.9	0.61
GPR89A	ENSG00000117262.18	0.61
CREB1	ENSG00000118260.14	0.61
WAC	ENSG00000095787.21	0.61
CACUL1	ENSG00000151893.14	0.61
SLC25A44	ENSG00000160785.13	0.6
PUM2	ENSG00000055917.15	0.6
CDC73	ENSG00000134371.9	0.6
POGZ	ENSG00000143442.21	0.6
ZBTB41	ENSG00000177888.7	0.6
PYGO2	ENSG00000163348.3	0.6
NUP133	ENSG00000069248.11	0.6
UBQLN4	ENSG00000160803.7	0.6
STX17	ENSG00000136874.10	0.6
YME1L1	ENSG00000136758.18	0.6
CSNK1G1	ENSG00000169118.15	0.6
7-Mar	ENSG00000136536.14	0.6
SIN3A	ENSG00000169375.15	0.6
KDM5B	ENSG00000117139.16	0.6
CDC42SE1	ENSG00000197622.12	0.6
CAPRIN1	ENSG00000135387.19	0.6
INTS7	ENSG00000143493.12	0.59
SMEK2	ENSG00000275052.4	0.59
FBXW2	ENSG00000119402.16	0.59
PGGT1B	ENSG00000164219.9	0.59

Supplementary Table 2. Correlation analysis between ADAR expression and immune cell clustering.

ID	Main specificity	Main function	#Genes	Annotation reliability
1	T-cells	Immune response	378	High
2	T-cells	T-cell receptor	243	Medium
3	Suprabasal keratinocytes	Cornification	185	High
4	Platelets	Platelet activation	157	High
5	Bronchus	Unknown function	208	Low
6	Late spermatids	Spermatogenesis	433	Medium
7	NK-cells	Immune response regulation	312	Medium
8	Oligodendrocytes	Myelin sheath organization	301	Medium
9	Neurons	Nervous system development	235	Medium
10	Neurons and Oligodendrocytes	Nervous system development	262	High
11	Non-specific	Transcription	188	Medium
12	Non-specific	Chromatin organization	249	Low
13	Hepatocytes	Oxidoreductase activity	177	High
14	Endometrium	Transcription regulation	304	Low
15	Smooth muscle cells	Muscle contraction	246	High
16	Non-specific	RNA binding	751	Low
17	Granulosa cells	Transcription regulation	353	Medium
18	Non-specific	Mixed function	294	Low
19	Macrophages	Innate immune response	247	High
20	Airway and Pancreas	Proteolysis	48	Medium
21	Serous glandular cells	Salivary secretion	134	Medium
22	Squamous epithelial cells	Keratinization	298	High
23	Langerhans cells	Immune response	91	Medium
24	Spermatids	Unknown function	117	Low
25	Schwann cells and Melanocytes	Mixed function	80	Low
26	Intestinal epithelial cells	Absorption	271	High
27	Skeletal myocytes	Muscle contraction	105	High
28	Cytotrophoblasts	Unknown function	227	Low
29	Hepatocytes	Metabolism	152	Medium
30	Breast	Lactation	82	High
31	Spermatocytes	Spermatogenesis	213	High
32	Neurons	Synaptic function	237	High
33	Macrophages	Degranulation	283	High
34	Plasma cells	Humoral immune response	86	High
35	Bipolar cells	Visual perception	159	High
36	Spermatids	Spermatogenesis	419	High
37	Neurons	Neuronal signaling	496	High
38	Neurons	Neuronal signaling	626	High
39	Non-specific	Translation	186	Medium
40	Plasma cells	Humoral immune response	409	Medium
41	Alveolar cells	Lung function	118	Medium
42	Spermatocytes and Spermatids	Spermatogenesis	353	Medium

43	Non-specific	Cell proliferation	263	Medium
44	Photoreceptor cells	Visual perception	359	High
45	Plasma cells	Humoral immune response	78	High
46	Granulocytes	Mast cell degranulation	60	Medium
47	Spermatogonia	Spermatogenesis	119	Medium
48	Plasmacytoid dendritic cells	Unknown function	134	Low
49	Early spermatids	Spermatogenesis	272	High
50	Enterocytes	Absorption	308	Medium
51	Late spermatids	Spermatogenesis	389	High
52	Endometrial stromal cells	ECM organization	116	Medium
53	Connective tissue cells	ECM organization	187	Medium
54	Extravillous trophoblasts	Unknown function	188	Medium
55	Endocrine cells	Hormone signaling	81	High
56	Ciliated cells	Cilium assembly	425	High
57	Early spermatids	Flagellum and Golgi organization	325	Medium
58	Gastric mucus-secreting cells	Digestion	45	High
59	Proximal enterocytes	Transmembrane transport	209	High
60	Proximal tubular cells	Absorption	361	High
61	Non-specific	Transcription	366	Low
62	B-cells	B-cell activation	166	High
63	Astrocytes	Nervous system maintenance	208	High
64	Non-specific	Transcription	655	Medium
65	Fibroblasts	ECM organization	292	High
66	Endothelial cells	Angiogenesis	468	Medium
67	Syncytiotrophoblasts	Pregnancy	153	Medium
68	Muller glia cells	Visual perception	142	High
69	Macrophages	Innate immune response	217	High
70	Basal prostatic cells	Lipid metabolism	167	Medium
71	Erythroid cells	Oxygen transport	140	High
72	Smooth muscle cells	ECM organization	208	High
73	Prostatic glandular cells	Transcription	109	High
74	Pancreatic cells	Mixed function	331	Low
75	Myeloid cells	Innate immune response	390	Medium
76	Spermatocytes and Spermatogonia	Spermatogenesis	164	High
77	Cardiomyocytes	Muscle contraction	404	High