

Chondroitin sulfate proteoglycan 4 as a marker for aggressive squamous cell carcinoma

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Supplementary Data

Supplementary Table S1. Top 100 genes expressed in HNSCC and correlated with CSPG4 ($R_1 > 0.46$, by Pearson correlation). Data derived from TCGA [47]. Also shown correlation of CSPG4 with genes in RDEB-SCCs (R_2) [43,145]. Genes significantly correlated with CSPG4 in both HNSCC, and RDEB-SCC are indicated [#], and bolded ($R > 0.46$, both HNSC & RDEB-SCC). Also shown gene function based on OMIM ontology analysis [135]. ADH – adhesion, EMT – epithelial to mesenchymal transition, GPS – growth, proliferation, survival, IMM – invasion, migration, metastasis, IMU – immune, OTH – other; SIG – signalling, TRA – miscellaneous cell transport events, TRN – transcription.

	Ensembl	R1	R2	OMIM
PDPN	ENSG00000162493.16	0.61	0.32	IMM, GPS, ADH
PLEC	ENSG00000178209.14	0.61	-0.48	ADH
FLRT2	ENSG00000185070.10	0.6	-0.07	ADH
CYP26B1	ENSG00000003137.8	0.59	-0.52	IMU
MN1	ENSG00000169184.5	0.58	0.73[#]	TRN
PIK3CD	ENSG00000171608.15	0.58	-0.67	GPS, SIG, EMT
PTRF	ENSG00000177469.12	0.58	-	TRA, SIG
LAMC2	ENSG00000058085.14	0.57	0.95[#]	ADH, IMM, SIG
APP	ENSG00000142192.20	0.57	0.49[#]	TRN
ITGA3	ENSG00000005884.17	0.57	0.19	ADH
SIRPA	ENSG00000198053.11	0.56	0.85[#]	SIG
SNAI2	ENSG00000019549.8	0.56	0.61[#]	TRN, EMT
COL17A1	ENSG00000065618.16	0.56	0.54[#]	ADH
PMEPA1	ENSG00000124225.15	0.56	0.42	SIG
LAMA3	ENSG00000053747.15	0.56	0.25	ADH, IMM, SIG
LRR8C	ENSG00000171488.14	0.56	-0.1	TRA
TENM3	ENSG00000218336.7	0.55	0.86[#]	OTH
ACTN1	ENSG00000072110.13	0.55	0.6[#]	ADH, IMM
LTBP1	ENSG00000049323.15	0.55	-0.09	SIG
CSMD2	ENSG00000121904.17	0.55	-0.19	IMM
WNT7A	ENSG00000154764.5	0.55	-0.37	SIG
CSPG4P13	ENSG00000260139.6	0.55	-0.81	Other
APBB2	ENSG00000163697.16	0.54	0.11	TRN
SDK2	ENSG00000069188.16	0.54	-0.22	ADH
ANTXR2	ENSG00000163297.16	0.54	-0.59	ADH
PRNP	ENSG00000171867.16	0.53	0.68[#]	NA
SLC12A4	ENSG00000124067.16	0.53	0.57[#]	NA
KIAA1644	ENSG00000138944.7	0.53	0.42	Other
ANXA5	ENSG00000164111.14	0.53	0.33	GPS, TRA, SIG
PXN	ENSG00000089159.15	0.53	0.32	ADH
SPON2	ENSG00000159674.11	0.53	0.11	ADH
STON2	ENSG00000140022.9	0.53	0.05	TRA

IRS1	ENSG00000169047.5	0.53	-0.12	TRA
CD276	ENSG00000103855.17	0.53	-0.33	IMU
TNFRSF12A	ENSG00000006327.13	0.53	-0.49	SIG
LAMB3	ENSG00000196878.12	0.53	-0.72	GPS
RTN4	ENSG00000115310.17	0.53	-	GPS
ITGA5	ENSG00000161638.10	0.52	0.93[#]	SIG
ITGA6	ENSG00000091409.14	0.52	0.56[#]	IMM
VEGFC	ENSG00000150630.3	0.52	0.44	GPS, TRN
SLC39A13	ENSG00000165915.13	0.52	0.13	TRA
CYP27C1	ENSG00000186684.12	0.52	0.08	TRN
MUL1	ENSG00000090432.6	0.52	-0.63	SIG
AJAP1	ENSG00000196581.10	0.51	0.36	IMM
AC108142.1	ENSG00000177822.7	0.51	0.26	Other
INHBA	ENSG00000122641.9	0.51	0.11	GPS, EMT
EFNB1	ENSG00000090776.5	0.51	-0.35	GPS, TRN
PLCD4	ENSG00000115556.13	0.51	-0.67	SIG
EXT1	ENSG00000182197.10	0.51	-0.71	GPS
GNA12	ENSG00000146535.13	0.51	-	GPS, IMM, SIG
EDNRA	ENSG00000151617.15	0.5	0.74[#]	TRN
PLEK2	ENSG00000100558.8	0.5	0.65[#]	GPS, IMM
ITGB1	ENSG00000150093.18	0.5	0.53[#]	GPS
EHD2	ENSG00000024422.11	0.5	0.43	TRA
GRIA3	ENSG00000125675.17	0.5	-0.21	TRA
RP11-497E19.1	ENSG00000205562.2	0.5	-0.32	Other
SERPINE1	ENSG00000106366.8	0.5	-0.34	TRN
KIRREL	ENSG00000183853.17	0.5	-0.35	Other
CD151	ENSG00000177697.17	0.5	-0.41	GPS, SIG
COL4A2	ENSG00000134871.17	0.5	-0.64	GPS
SEMA3C	ENSG00000075223.13	0.5	-	GPS
CLMP	ENSG00000166250.11	0.5	-	ADH
PLAU	ENSG00000122861.15	0.49	0.75[#]	IMM
P4HA2	ENSG00000072682.18	0.49	0.66[#]	GPS, SIG
VAV2	ENSG00000160293.16	0.49	0.66[#]	SIG
ACTR1A	ENSG00000138107.11	0.49	0.66[#]	TRA
RAB11FIP5	ENSG00000135631.15	0.49	0.64[#]	TRA
RP11-167H9.3	ENSG00000243321.3	0.49	0.63[#]	Other
LUZP1	ENSG00000169641.13	0.49	0.59[#]	SIG
ESYT1	ENSG00000139641.12	0.49	0.31	GPS, TRA
PDGFC	ENSG00000145431.10	0.49	0.17	GPS
DSE	ENSG00000111817.16	0.49	-0.09	IMU, TRN
PANX1	ENSG00000110218.8	0.49	-0.11	SIG
DKK3	ENSG00000050165.17	0.49	-0.12	SIG
TLL1	ENSG00000038295.7	0.49	-	Other
TSPAN5	ENSG00000168785.7	0.48	0.76[#]	GPS, ADH, IMM
SRRD	ENSG00000100104.12	0.48	0.62[#]	Other
FBLIM1	ENSG00000162458.12	0.48	0.16	ADH
MSN	ENSG00000147065.16	0.48	0.01	IMM, SIG
SLC9A1	ENSG00000090020.10	0.48	-0.57	Other
CHSY1	ENSG00000131873.5	0.48	-0.6	GPS
COL16A1	ENSG00000084636.17	0.48	-0.61	Other
EHD1	ENSG00000110047.17	0.47	0.62	TRA
PTPN21	ENSG00000070778.12	0.47	0.31	GPS, SIG
LIMA1	ENSG00000050405.13	0.47	0.24	ADH

PLOD1	ENSG00000083444.16	0.47	-0.3	TRN
CLSTN1	ENSG00000171603.16	0.47	-0.5	TRA, SIG
TSHZ3	ENSG00000121297.6	0.47	-0.74	TRN, SIG
SORCS2	ENSG00000184985.16	0.46	0.49[#]	SIG
PHLDB1	ENSG00000019144.16	0.46	0.39	GPS, EMT
VDR	ENSG00000111424.10	0.46	0.19	TRN
PTK7	ENSG00000112655.15	0.46	0.14	IMM
COL4A1	ENSG00000187498.14	0.46	0.13	TRN
AFAP1L1	ENSG00000157510.13	0.46	0.05	GPS
TGFBR2	ENSG00000163513.17	0.46	-0.12	TRN, SIG
TGFBI	ENSG00000120708.16	0.46	-0.18	TRN
SCRN1	ENSG00000136193.16	0.46	-0.44	Other
MYH9	ENSG00000100345.20	0.46	-0.48	TRN
MMP14	ENSG00000157227.12	0.46	-0.58	TRN
NT5E	ENSG00000135318.11	0.46	-0.58	TRN