

Table S1. Hypermethylated candidate genes in head & neck cancers.

Probe	Log2 (Fold)	Gene	Methylated cancer	References
cg07655636	4.018	ZNF43	Oral squamous cell carcinoma, colorectal cancer	(17,18)
cg22538054	3.847	USP44	Oral squamous cell carcinoma	(19)
cg11595545	3.827	KCNA3	Breast cancer	(20)
cg12042659	3.821	ZNF132	Head and neck squamous cell carcinoma	(21)
cg06952671	3.266	ITGA4	Oral squamous cell carcinoma, colorectal cancer	(22,23)
cg26014391	2.467	PHYHIPL	Cholangiocarcinoma	(24)
cg25886284	2.403	ZFP82	Head and neck squamous cell carcinoma, gingivobuccal complex oral squamous cell carcinoma	(21,25)
cg14893163	1.719	PCDH17	Esophageal squamous cell carcinoma	(26)
cg16902509	1.122	ITGA8	Breast cancer	(27)

Table SII. Top 50 up- and downregulated proteins in FaDu cells.

Top 50 up-regulated proteins in FaDu		Top 50 down-regulated proteins in FaDu	
Gene symbol	TGA4/Con	Gene symbol	ITGA4/Con
COPS9	18.614	HYDIN	0.019
MMGT1	16.377	PCMT1	0.043
AHCYL2	14.577	GIGYF2	0.043
TRNT1	13.530	PFDN1	0.064
SF3A2	11.903	LGMN	0.089
MCMBP	11.253	STX16-NPEPL1	0.103
MRPS12	11.120	TTC1	0.105
LACTB2	10.752	NOLC1	0.109
PLXNB2	10.746	LNPK	0.114
RAB32	10.541	SF1	0.124
SLC16A1	8.932	OSBPL9	0.129
EMC6	8.663	CD70	0.131
TSG101	8.092	C11orf98	0.138
TES	7.876	MMP20	0.140
APOOL	7.617	TRMT5	0.159
MAP7D1	7.363	SNX5	0.162
NXN	7.124	PIH1D1	0.167
SDF2	6.559	RAP2B	0.168
CCNDBP1	6.250	RAB13	0.191
GOLGA5	5.502	MARS2	0.193
HMOX1	5.484	CNN2	0.196
HBB	5.122	PNPLA6	0.204
F5	5.111	IRF9	0.207
SQSTM1	5.014	CDK9	0.209
GTPBP3	5.002	RAB34	0.217
ECSIT	4.911	SH3BGRL3	0.224
HBA1	4.778	NUP54	0.226
PDHX	4.637	ANXA10	0.228
NDUFAF4	4.473	RAD21	0.229
NDUFA2	4.418	OCIAD1	0.231
DERL2	4.233	MRPS26	0.246
KRT9	3.953	BCAS2	0.246
SLC29A1	3.833	PSMG3	0.248
YTHDF2	3.823	BAX	0.251
FAM210A	3.778	CCDC127	0.251
AGFG1	3.717	PKN1	0.254
IBA57	3.512	FAH	0.255
HLA-B	3.461	ATRIP	0.255
SCRN1	3.459	TSNAX	0.263
PPP1R7	3.453	PDCD4	0.269
CD151	3.320	DOK3	0.269
NEK9	3.311	PPIC	0.271
CPTP	3.300	NDUFAF2	0.273
ITIH2	3.227	GALK1	0.284
MRPL22	3.202	ENO2	0.288
PIGT	3.178	LRRFIP1	0.289
PPP4C	3.148	UQCRCQ	0.292
CD9	3.145	BCL2L13	0.293
LARS2	3.016	IGF2R	0.293
PITPNA	2.971	ATP6V0D1	0.303

Table SIII. Top 50 up- and downregulated proteins in YD-15 cells.

Top 50 up-regulated proteins in YD-15		Top 50 down-regulated proteins in YD-15	
Gene symbol	ITGA4 /Con	Gene symbol	ITGA4 /Con
RPL10L	47.285	4 SV	0.024
GLO1	42.145	NIPBL	0.025
SYAP1	36.749	MARS2	0.029
AGK	29.523	INCENP	0.030
PTMA	29.105	GOLGA2	0.033
RAD23A	28.664	RPLP0P6	0.036
TOR1AIP2	27.674	EMC6	0.061
CSTF1	27.261	TMEM30A	0.066
H3C1	26.696	TRMT5	0.077
GOLT1B	25.692	POLR2H	0.079
CREB1	25.590	USP9X	0.081
CSDE1	24.877	GPRC5A	0.087
EIF3H	22.005	GNPNAT1	0.100
CD276	21.696	PFKL	0.103
HNRNPK	20.643	PPP1R13L	0.105
LLPH	17.889	TREX1	0.117
APP	16.461	IBA57	0.119
DCUN1D1	14.777	UNC13D	0.121
UBE2I	14.197	DBT	0.123
H3C15	13.983	PBK	0.125
ORAI1	13.493	ITGA5	0.136
NPLOC4	13.435	ASS1	0.148
4 SV	13.309	MFAP1	0.152
LRRFIP1	12.605	DCAF13	0.153
COPS6	12.483	GNA11	0.161
AIFM2	12.346	DERL2	0.171
LMNA	12.027	IRF9	0.179
DNPH1	11.525	ORC2	0.183
ISG15	11.130	WDR46	0.188
UBA2	10.788	MMGT1	0.206
WDR90	10.755	GALNT2	0.207
PKN1	10.590	LEMD3	0.207
PTBP3	10.469	CLIP1	0.212
BAG3	10.223	SPATA5	0.223
CDC16	10.181	IFI44	0.226
ASF1A	9.959	CDCA3	0.238
OCIAD1	9.853	DDX49	0.238
PTMS	9.732	PFDN4	0.243
CHCHD4	9.599	SLCO4A1	0.248
PHIP	9.534	KRT1	0.252
FAM50A	9.516	STARD3NL	0.253
PCMT1	9.495	NUFIP2	0.255
MOCS3	9.261	UAP1	0.256
NOL7	9.193	BSG	0.263
SDCBP	8.981	MPDU1	0.265
BAZ1B	8.276	SNX5	0.273
FOXD3	8.269	ACAA1	0.278
SF3B5	8.264	GAN	0.279
LIG1	8.210	SLC25A4	0.284
CDK7	8.092	OSBPL8	0.284