

Supplementary Table S3

Putative methylation regulated transcripts downregulated in both adenoma and CRC samples

Probe Set ID	Gene Symbol	Gene Title
222688_at	ACER3	alkaline ceramidase 3
224667_x_at	ANAPC16	anaphase promoting complex subunit 16
202888_s_at	ANPEP	alanyl (membrane) aminopeptidase
1555962_at	B3GNT7	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7
205263_at	BCL10	B-cell CLL/lymphoma 10
229520_s_at	C14orf118	chromosome 14 open reading frame 118
223484_at	C15orf48	chromosome 15 open reading frame 48
224458_at	C9orf125	chromosome 9 open reading frame 125
214315_x_at	CALR	calreticulin
232266_x_at	CDK13	Cyclin-dependent kinase 13
204159_at	CDKN2C	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
205709_s_at	CDS1	CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 1
200998_s_at	CKAP4	cytoskeleton-associated protein 4
220026_at	CLCA4	chloride channel accessory 4
234981_x_at	CMBL	carboxymethylenebutenolidase homolog (Pseudomonas)
225009_at	CMTM4	CKLF-like MARVEL transmembrane domain containing 4
218900_at	CNNM4	cyclin M4
244546_at	CYCS	cytochrome c, somatic
219290_x_at	DAPP1	dual adaptor of phosphotyrosine and 3-phosphoinositides
205370_x_at	DBT	dihydrolipoamide branched chain transacylase E2
242562_at	DNAJC24	DnaJ (Hsp40) homolog, subfamily C, member 24
227955_s_at	EFNA5	ephrin-A5
242608_x_at	FAM161B	Family with sequence similarity 161, member B
226062_x_at	FAM63A	family with sequence similarity 63, member A
201722_s_at	GALNT1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1 (GalNAc-T1)
206422_at	GCG	glucagon
212959_s_at	GNPTAB	N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits
211040_x_at	GTSE1	G-2 and S-phase expressed 1
220071_x_at	HAUS2	HAUS augmin-like complex, subunit 2
217845_x_at	HIGD1A	HIG1 hypoxia inducible domain family, member 1A
200799_at	HSPA1A	heat shock 70kDa protein 1A
206502_s_at	INSM1	insulinoma-associated 1
202746_at	ITM2A	integral membrane protein 2A
1562063_x_at	KIAA1245 /// LOC200030 /// NBPF1 /// NBPF10 /// NBPF11 /// NBPF8 /// NBPF9	KIAA1245 /// neuroblastoma breakpoint family, member 11-like /// neuroblastoma breakpoint family, member 1 /// neuroblastoma breakpoint family, member 10 /// neuroblastoma breakpoint family, member 11 /// neuroblastoma breakpoint family, member 8 /// neuroblastoma breakpoint family, member 9
235167_at	LOC100190986	hypothetical LOC100190986
204037_at	LPAR1	lysophosphatidic acid receptor 1
204674_at	LRMP	lymphoid-restricted membrane protein
220376_at	LRRC19	leucine rich repeat containing 19
211452_x_at	LRRFIP1	leucine rich repeat (in FLII) interacting protein 1
209579_s_at	MBD4	methyl-CpG binding domain protein 4
217109_at	MUC4	mucin 4, cell surface associated

232169_x_at	NDUFS8	NADH dehydrogenase (ubiquinone) Fe-S protein 8, 23kDa (NADH-coenzyme Q reductase)
201502_s_at	NFKBIA	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha
239748_x_at	OCIAD1	OCIA domain containing 1
206323_x_at	OPHN1	oligophrenin 1
1554384_at	PADI2	peptidyl arginine deiminase, type II
242871_at	PAQR5	progesterone and adiponectin receptor family member V
204687_at	PARM1	prostate androgen-regulated mucin-like protein 1
206792_x_at	PDE4C	phosphodiesterase 4C, cAMP-specific (phosphodiesterase E1 dunce homolog, Drosophila)
203131_at	PDGFRA	platelet-derived growth factor receptor, alpha polypeptide
215179_x_at	PGF	Placental growth factor
207109_at	POU2F3	POU class 2 homeobox 3
219392_x_at	PRR11	proline rich 11
232215_x_at	PRR11	proline rich 11
238513_at	PRRG4	Proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane)
215894_at	PTGDR	prostaglandin D2 receptor (DP)
221872_at	RARRES1	retinoic acid receptor responder (tazarotene induced) 1
215588_x_at	RIOK3	RIO kinase 3 (yeast)
214041_x_at	RPL37A	Ribosomal protein L37a
33323_r_at	SFN	stratifin
230375_at	SFRS18	splicing factor, arginine/serine-rich 18
218835_at	SFTPA2	surfactant protein A2
213936_x_at	SFTPB	surfactant protein B
242578_x_at	SLC22A3	Solute carrier family 22 (extraneuronal monoamine transporter), member 3
220796_x_at	SLC35E1	solute carrier family 35, member E1
232739_at	SPIB	Spi-B transcription factor (Spi-1/PU.1 related)
202565_s_at	SVIL	supervillin
236248_x_at	TADA2B	transcriptional adaptor 2B
212761_at	TCF7L2	transcription factor 7-like 2 (T-cell specific, HMG-box)
229341_at	TFCP2L1	transcription factor CP2-like 1
242377_x_at	THUMPD3	THUMP domain containing 3
205812_s_at	TMED9	transmembrane emp24 protein transport domain containing 9
240770_at	TMEM171	transmembrane protein 171
219736_at	TRIM36	tripartite motif-containing 36
236715_x_at	UACA	uveal autoantigen with coiled-coil domains and ankyrin repeats
235327_x_at	UBXN2A	UBX domain protein 2A
207245_at	UGT2B17	UDP glucuronosyltransferase 2 family, polypeptide B17
233595_at	USP34	ubiquitin specific peptidase 34
218171_at	VPS4B	vacuolar protein sorting 4 homolog B (S. cerevisiae)
232516_x_at	YY1AP1	YY1 associated protein 1
233399_x_at	ZNF252	Zinc finger protein 252
208137_x_at	ZNF611	zinc finger protein 611
215978_x_at	ZNF721	zinc finger protein 721
1566887_x_at	---	---
1569409_x_at	---	---
207730_x_at	---	---
208246_x_at	---	---
210679_x_at	---	---
214989_x_at	---	---

215604_x_at	---	---
215628_x_at	---	---
216147_at	---	---
216187_x_at	---	---
217679_x_at	---	---
229157_at	---	---
229434_at	---	---
233041_x_at	---	---
233427_x_at	---	---
235084_x_at	---	---
235757_at	---	---
237868_x_at	---	---
240612_at	---	---
241303_x_at	---	---
242235_x_at	---	---
242398_x_at	---	---
243147_x_at	---	---
243931_at	---	---
244384_at	---	---

Supplementary Table S3. From the 154 methylation related transcripts (listed in Supplementary Table S2.), 108 were also downregulated in adenoma samples. These transcripts were found to be inactivated by DNA methylation at the early phase of carcinogenesis. Supplementary Figure S1 shows the expression pattern of these genes in normal, adenoma and tumor samples.