

SUPPLEMENTARY INFORMATION

Classification of Colon Cancer Patients Based on the Methylation Patterns of Promoters

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Supplementary Table 2. Pathway analysis result from hypermethylated promoter CGI genes

General pathway	Pathway name	p-value	
GPCR	GPCR signaling	5.79.E-06	
	GPCR ligand binding	1.58.E-02	
	G alpha (s) signalling events	1.10.E-02	
Migration, invasion ECM	ECM organization	5.32E-07	
	Collagen biosynthesis and modifying enzymes	3.57E-04	
	Collagen formation	1.71E-03	
	Degradation of the extracellular matrix	1.74E-03	
	Elastic fiber formation	1.56E-02	
	Molecules associated with elastic fibers	1.90E-02	
	ECM proteoglycans	3.03E-02	
	Assembly of collagen fibrils and other multimeric structures	3.03E-02	
	Heparan sulfate/heparin (HS-GAG) metabolism	3.03E-02	
	Cell adhesion	CAMs	2.02E-04
		NCAM1 interactions	5.27E-04
		NCAM signaling for neurite out-growth	1.12E-02
		Integrin cell surface interactions	2.69E-02
		Integrin signaling pathway	3.95E-02
		Gap junction	3.98E-02
		Chondroitin sulfate/dermatan sulfate metabolism	2.28E-02
		Sialic acid metabolism	2.68E-02
		Chondroitin sulfate biosynthesis	3.75E-02
		Beta1 integrin cell surface interactions	2.40E-02
etc	Netrin-1 signaling	8.45E-03	
Ion channel	Ion channels and their functional role in vascular endothelium	8.45.E-03	
	Potassium channels	2.06.E-02	
	Ion channel transport	3.04.E-02	
	Voltage gated potassium channels	3.17.E-02	
Calcium signaling pathway	Calcium signaling pathway	3.52.E-04	
Glutamate receptor	Activation of NMDA receptor upon glutamate	2.42.E-02	

	binding and postsynaptic events	
	Unblocking of NMDA receptor, glutamate binding and activation	2.63.E-02
	Activation of AMPA receptors	1.53.E-02
	Trafficking of GluR2-containing AMPA receptors	3.04.E-02
Angiogenesis	O-glycosylation of TSR domain-containing proteins	1.11.E-03
RAS family	Regulation of RAC1 activity	4.98.E-03
Wnt signaling	Negative regulation of TCF-dependent signaling by Wnt ligand antagonists	1.98.E-02
Generic transcription pathway	Generic transcription pathway	1.18.E-04
Developmental biology	Developmental biology	2.76.E-04
Melanoma	Melanoma	2.71.E-02

CGI, CpG island; GPCR, G protein coupled receptor; ECM, extracellular matrix; CAMs, cell adhesion molecules; NCAM, neural cell adhesion molecule; NMDA, N-methyl-D-aspartate; AMPA, α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid; TSR, thrombospondin type 1 repeat; TCF, T-cell factor.