

The prognostic efficacy of cell-free DNA hypermethylation in colorectal cancer

SUPPLEMENTARY TABLES

Supplementary Table 1: Gene names and known function

	<i>Name</i>	<i>Function</i>
<i>ALX4</i>	Aristaless-like homeobox 1	Skull and limb development
<i>APC</i>	Adenomatous polyposis	Cellular adhesion and β -catenin regulation
<i>BMP3</i>	Bone morphogenetic protein 3	Bone formation
<i>BNC1</i>	Basonuclin 1	Regulates proliferation and rRNA transcription
<i>BRCA1</i>	Breast cancer 1	DNA repair and gene transcription
<i>CDKN2A</i>	Cyclin dependent kinase inhibitor 2A	Cell-cycle regulation
<i>HIC1</i>	Hypermethylated in cancer 1	Gene transcription and cellular division
<i>HLTF</i>	Helicase like transcription factor	Gene transcription and cellular division
<i>MGMT</i>	O-6-methylguanine-DNA methyltransferase	DNA repair
<i>MLH1</i>	Mutl homolog 1	DNA repair
<i>NDRG4</i>	N-myc downstream-regulated gene 4	Cell-cycle progression and regulation of mitotic signals
<i>NPTX2</i>	Neuronal pentraxin 2	Synapse formation and non-apoptotic cell death
<i>NEUROG1</i>	Neurogenin 1	Neuronal differentiation
<i>OSMR</i>	Oncostatin M receptor	Cytokine receptor for cell signalling
<i>PHACTR3</i>	Phosphatase and actin regulator 3	Nuclear scaffolding of proliferating cells
<i>PPENK</i>	Preproenkephalin	Synaptic signalling
<i>RARB</i>	Retinoic acid receptor beta	Cellular signalling and retinoic acid binding
<i>RASSF1A</i>	Ras association domain family member 1A	Cell-cycle regulation and DNA repair
<i>SDC2</i>	Syndecan 2	Cellular adhesion, signalling, and cytoskeletal structure
<i>SEPT9</i>	Septin 9	Cell-cycle regulation and cytokinesis
<i>SFRP1</i>	Secreted frizzled related peptide 1	Modulator of Wnt signalling
<i>SFRP2</i>	Secreted frizzled related peptide 2	Modulator of Wnt signalling
<i>SPG20</i>	Spastic paraplegia 20	Regulates endosomal traffic and mitochondria function
<i>SST</i>	Somatostatin	Inhibitory hormone and regulator of endocrine system
<i>TAC1</i>	Tachykinin precursor 1	Neurotransmitting and vasodilation
<i>THBD</i>	Thrombomodulin	Inhibition of haemostasis
<i>TFPI2</i>	Tissue factor pathway inhibitor 2	Inhibition of haemostasis
<i>VIM</i>	Vimentin	Cell shape and integrity maintenance
<i>WIF1</i>	Wnt inhibitory factor 1	Cell fate regulation in oncogenesis and embryogenesis
<i>WNT5A</i>	Wnt family member 5A	Cell fate regulation in oncogenesis and embryogenesis

Note. Gene names and known function have been cross-matched with the RefSeq database (<http://www.ncbi.nlm.nih.gov/refseq/>).

Supplementary Table 2: Characteristics of gene specific primers and probes

See Supplementary File 1

Supplementary Table 3: Characteristics of the reference gene (*MEST*) primers and probes

	<i>Outer primers</i>		<i>Inner primers</i>		<i>Probes</i>	<i>Coordinates</i>	<i>Accession no.</i>
<i>MEST U</i> (+)	GGTTTAAAAG TTCGGTGTATT	(130)	TGTTGTGGTAA TTAGTATATTT	(83)	CGCGAGTAGTTGTG TTTGTTCGCG	130492052 – 130492181	NC_000007.14
(-)	CCIAACAATA CAACCACTCC		CAACCACTCAA CATACTACA				
<i>MEST M</i> (+)	GCGATGGGTTT GTGCGC	(130)	CGACGTTTTAG TTTCGAGTC	(86)	CGATCGGTGGTC GGTTCGATCG	130486225 – 130486355	NC_000007.14
(-)	GAAAAACCGA TTACGCATACG		CGCTTCCTAAAA CCAAAAATTCTCG				

Note. The primer and probe sequences for the methylation specific polymerase chain reaction with the individual amplicon sizes represented as number of base pairs in brackets to the right of the outer/inner primers respectively. The NCBI accession number (no.) and the remapping coordinates of the amplified promoter regions are also presented. (+) Forward primer, (-) Reverse primer. (*U*) indicates the un-methylated version of *MEST*, (*M*) indicates the methylated version of *MEST*.