Supplementary Table 1. Complete list of 1,628 human samples included in the study

Normal Tissues (n: 424)	n	***Tumorigenic Samples (n: 1054)***	n	***Non-cancerous diseases (n: 150)***	n
Primary tissues (n: 390)		*Solid tumors (n: 611)*		*Aorta (n: 18)*	
Aorta	2	Bladder	44	Atherosclerotic lesions	18
Apheresis	4	Breast	76		
Bladder	8	Cervix	4	*Blood (n: 86)*	
Blood	180	Colon	110	Lupus	7
Bone marrow	14	Endometrium	68	Autism	30
Brain	6	Esophagus	13	Alzheimer	35
Breast	2	Ganglioneurom	1	Primary biliary cirrhosis (PBC)	4
Buccal epithelium	21	Glioma	90	Systemic sclerosis (SSc)	10
Cerebellum	1	Head-neck	9		
Cervix	1	Kidney	5	*Brain (n: 26)*	
Colon	97	Liver	19	Alzheimer	11
Endometrium	2	Melanoma	21	Dementia (with Lewy bodies)	13
Esophagus	5	Neuroblastoma	16	Parkinson	1
Fetal brain	1	Non-small Cell Lung Carcinoma	23		
Heart	2	Ovarian	30	*Muscle (n: 17)*	
Liver	5	Pancreas*	29	Myopathies	17
Lung	3	Prostate	14		
Muscle	5	Stomach	16		
Ovary	2	Testis	23	*Immunodeficiency, Centromere instability and Facial anomalies syndrome (ICF syndrome)*	4
Pancreas	7				
Prostate	5	*Hematologic malignancies (n: 244)*			
Skin	5	Acute lymphoblastic leukemia (ALL)	58		
Stomach	7	Acute myeloblastic leukemia (AML)	34		
Suprarenal gland	1	Chronic lymphocytic leukemia (CLL)	25		
Testis	4	Diffuse large B-cell lymphoma (DLBCL)	49		
		Follicular lymphoma (FL)	14		
Normal cell lines (n: 7)		Mantle cell lymphoma (MCL)	10		
Lymphoblastoid	6	Molecular Burkitt's lymphoma (mBL)	18		
Melanocyte	1	Multiple myeloma (MM)	14		
		Myeloproliferative syndromes (MDS/MPS)	13		
Stem Cells (n: 27)		Mixed lineage leukemia	9		
Adult	19				
Embryonic	8	*Metastases (n:50)*			
		Colon to Liver	32		
		Colon to Brain	13		
		Kidney to Brain	5		
		Premalignant lesions (n: 25)			
		Adenomas (colon)	12		
		Breast	7		
		Endometrium hyperplasia	6		
		Cancer cell lines (n: 82)			
		Breast	6		
		Cervix	4		
		Colon	10		
		Esophagus	2		
		Head-neck	2		
		Leukemia	3		
		Liver	3		
		Lung	10		
		Lymphoma	23		
		Melanocyte	2		
		Neuroblastoma	2		
		Pancreas	12		
		Prostate	3		
		Carcinoma of unknow primary (CUP)	42		

Supplementary Table 2. List of CpG sites methylated in all normal samples studied. CGI: CpG Island associated (Y) or not associated (N). TSS: transcription start site.

CpG site (n: 17)	CGI	Annotation	Distance to TSS
AFF3_P808_F	N	AF4/FMR2 family, member 3 (AFF3), transcript variant 2	-808
BCL2A1_P1127_R	Y	BCL2-related protein A1 (BCL2A1)	-1127
CD1A_P414_R	N	CD1a antigen (CD1A)	-414
GNG7_E310_R	Y	guanine nucleotide binding protein (G protein), gamma 7 (GNG7)	310
MMP1_P397_R	N	matrix metallopeptidase 1 (interstitial collagenase) (MMP1)	-397
MMP1_P460_F	N	matrix metallopeptidase 1 (interstitial collagenase) (MMP1)	-460
PWCR1_E81_R	N	Prader-Willi syndrome chromosome region 1 (PWCR1) on chromosome 15	81
SLC22A2_E271_R	Y	solute carrier family 22 (organic cation transporter), member 2 (SLC22A2), transcript variant 2	271
TIMP3_P1114_R	N	TIMP metallopeptidase inhibitor 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3)	-1114
TIMP3_P690_R	N	TIMP metallopeptidase inhibitor 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3)	-690
TNF_P1084_F	N	tumor necrosis factor (TNF superfamily, member 2) (TNF)	-1084
UGT1A1_P564_R	N	UDP glucuronosyltransferase 1 family, polypeptide A1 (UGT1A1)	-564
UGT1A7_P751_R	N	UDP glucuronosyltransferase 1 family, polypeptide A7 (UGT1A7)	-751
USP29_E274_F	N	ubiquitin specific peptidase 29 (USP29)	274
XRCC2_P1077_F	N	X-ray repair complementing defective repair in Chinese hamster cells 2 (XRCC2)	-1077
ZIM3_E203_F	N	zinc finger, imprinted 3 (ZIM3)	203
ZNFN1A1_P179_F	N	zinc finger protein, subfamily 1A, 1 (Ikaros) (ZNFN1A1)	-179

Supplementary Table 3. List of CpG sites unmethylated in all the normal tissues studied. CpG island associated (CGI): Yes (Y) or not (N). TSS: transcription start site.

CpG site (n: 488)	CGI	Annotation	Distance to TSS
ABCA1_E120_R	Y	ATP-binding cassette, sub-family A (ABC1), member 1 (ABCA1)	120
ABCA1_P45_F	Y	ATP-binding cassette, sub-family A (ABC1), member 1 (ABCA1)	-45
ABCC5_P444_F	Y	ATP-binding cassette, sub-family C (CFTR/MRP), member 5 (ABCC5), transcript variant 1	-444
ABCG2_P178_R	Y	ATP-binding cassette, sub-family G (WHITE), member 2 (ABCG2)	-178
ABCG2_P310_R	Y	ATP-binding cassette, sub-family G (WHITE), member 2 (ABCG2)	-310
ABL1_P53_F	Y	v-abl Abelson murine leukemia viral oncogene homolog 1 (ABL1), transcript variant a	-53
ABL2_P459_R	Y	v-abl Abelson murine leukemia viral oncogene homolog 2 (arg, Abelson-related gene) (ABL2), transcript variant b	-459
ABO_E110_F	Y	ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase) (ABO)	110
ACVR1B_E497_R	Y	activin A receptor, type IB (ACVR1B), transcript variant 1	497
ACVR1C_P115_R	Y	activin A receptor, type IC (ACVR1C)	-115
ACVR1C_P363_F	Y	activin A receptor, type IC (ACVR1C)	-363
ACVR2B_E27_R	Y	activin A receptor, type IIB (ACVR2B)	27
ACVR2B_P676_F	Y	activin A receptor, type IIB (ACVR2B)	-676
ADAMTS12_P250_R	Y	ADAM metallopeptidase with thrombospondin type 1 motif, 12 (ADAMTS12)	-250
ADCYAP1_E163_R	Y	adenylate cyclase activating polypeptide 1 (pituitary) (ADCYAP1)	163
AGTR1_P41_F	Y	angiotensin II receptor, type 1 (AGTR1), transcript variant 1	-41
AHR_E103_F	Y	aryl hydrocarbon receptor (AHR)	103
AHR_P166_R	Y	aryl hydrocarbon receptor (AHR)	-166
AKT1_P310_R	Y	v-akt murine thymoma viral oncogene homolog 1 (AKT1), transcript variant 2	-310
ALK_E183_R	Y	anaplastic lymphoma kinase (Ki-1) (ALK)	183
ALK_P28_F	Y	anaplastic lymphoma kinase (Ki-1) (ALK)	-28
ALPL_P278_F	Y	alkaline phosphatase, liver/bone/kidney (ALPL)	-278
APBA1_E99_R	Y	amyloid beta (A4) precursor protein-binding, family A, member 1 (X11) (APBA1)	99
APBA1_P644_F	Y	amyloid beta (A4) precursor protein-binding, family A, member 1 (X11) (APBA1)	-644
APP_E8_F	Y	amyloid beta (A4) precursor protein (peptidase nexin-II, Alzheimer disease) (APP), transcript variant 2	8
APP_P179_R	Y	amyloid beta (A4) precursor protein (peptidase nexin-II, Alzheimer disease) (APP), transcript variant 2	-179
AREG_E25_F	Y	amphiregulin (schwannoma-derived growth factor) (AREG)	25
ARNT_P238_R	Y	aryl hydrocarbon receptor nuclear translocator (ARNT), transcript variant 2	-238
ASCL1_E24_F	Y	achaete-scute complex-like 1 (Drosophila) (ASCL1)	24
BCAM_E100_R	Y	basal cell adhesion molecule (Lutheran blood group) (BCAM), transcript variant 2	100
BCL3_P1038_R	Y	B-cell CLL/lymphoma 3 (BCL3)	-1038
BCL6_P248_R	Y	B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6), transcript variant 2	-248
BDNF_E19_R	Y	brain-derived neurotrophic factor (BDNF), transcript variant 5	19
BMP2_E48_R	Y	bone morphogenetic protein 2 (BMP2)	48
BMP2_P1201_F	Y	bone morphogenetic protein 2 (BMP2)	-1201
BMP3_E147_F	Y	bone morphogenetic protein 3 (osteogenic) (BMP3)	147
BMP3_P56_R	Y	bone morphogenetic protein 3 (osteogenic) (BMP3)	-56
BMP6_P163_F	Y	bone morphogenetic protein 6 (BMP6)	-163
BMP6_P398_F	Y	bone morphogenetic protein 6 (BMP6)	-398
BMPR1A_P956_F	Y	bone morphogenetic protein receptor, type IA (BMPR1A)	-956

Supplementary Table 3 (cont.)

BMPR2_E435_F	Y	bone morphogenetic protein receptor, type II (serine/threonine kinase) (BMPR2)	435
BMPR2_P1271_F	Y	bone morphogenetic protein receptor, type II (serine/threonine kinase) (BMPR2)	-1271
BSG_P211_R	Y	basigin (Ok blood group) (BSG), transcript variant 1	-211
C20orf47_P225_R	Y	ERGIC and golgi 3 (ERGIC3), transcript variant 2	-225
CALCA_P75_F	Y	calcitonin/calcitonin-related polypeptide, alpha (CALCA), transcript variant 2	-75
CASP2_P192_F	Y	caspase 2, apoptosis-related cysteine peptidase (neural precursor cell expressed, developmentally down-regulated 2) (CASP2), transcript variant 1	-192
CASP3_P420_R	Y	caspase 3, apoptosis-related cysteine peptidase (CASP3), transcript variant alpha	147
CASP6_P201_F	Y	caspase 6, apoptosis-related cysteine peptidase (CASP6), transcript variant alpha	-201
CASP6_P230_R	Y	caspase 6, apoptosis-related cysteine peptidase (CASP6), transcript variant alpha	-230
CAV1_P130_R	Y	caveolin 1, caveolae protein, 22kDa (CAV1)	-130
CAV2_E33_R	Y	caveolin 2 (CAV2), transcript variant 2	33
CCKBR_P361_R	Y	cholecystokinin B receptor (CCKBR)	-361
CCKBR_P480_F	Y	cholecystokinin B receptor (CCKBR)	-480
CCNC_P132_R	Y	cyclin C (CCNC), transcript variant 2	-132
CCND1_E280_R	Y	cyclin D1 (PRAD1: parathyroid adenomatosis 1) (CCND1)	280
CCND1_P343_R	Y	cyclin D1 (PRAD1: parathyroid adenomatosis 1) (CCND1)	-343
CCND2_P887_F	Y	cyclin D2 (CCND2)	-887
CCND2_P898_R	Y	cyclin D2 (CCND2)	-898
CCND3_P435_F	Y	cyclin D3 (CCND3)	-435
CCNE1_P683_F	Y	cyclin E1 (CCNE1), transcript variant 2	-683
CD34_E20_R	N	CD34 antigen (CD34), transcript variant 1	20
CD44_E26_F	Y	CD44 antigen (Indian blood group) (CD44), transcript variant 2	26
CD44_P87_F	Y	CD44 antigen (Indian blood group) (CD44), transcript variant 2	-87
CD9_E14_R	Y	CD9 antigen (p24) (CD9)	14
CDC25B_E83_F	Y	cell division cycle 25B (CDC25B), transcript variant 2	83
CDH1_P45_F	Y	cadherin 1, type 1, E-cadherin (epithelial) (CDH1)	-45
CDH1_P52_R	Y	cadherin 1, type 1, E-cadherin (epithelial) (CDH1)	-52
CDH11_E102_R	Y	cadherin 11, type 2, OB-cadherin (osteoblast) (CDH11)	102
CDH11_P203_R	Y	cadherin 11, type 2, OB-cadherin (osteoblast) (CDH11)	-203
CDH3_E100_R	Y	cadherin 3, type 1, P-cadherin (placental) (CDH3)	100
CDK10_E74_F	Y	cyclin-dependent kinase (CDC2-like) 10 (CDK10), transcript variant 2	74
CDK6_E256_F	Y	cyclin-dependent kinase 6 (CDK6)	256
CDK6_P291_R	Y	cyclin-dependent kinase 6 (CDK6)	-1465
CDKN1A_E101_F	Y	cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A), transcript variant 1	101
CDKN1B_P1161_F	N	cyclin-dependent kinase inhibitor 1B (p27, Kip1) (CDKN1B)	-1161
CDKN1C_P6_R	Y	cyclin-dependent kinase inhibitor 1C (p57, Kip2) (CDKN1C)	-6
CDKN1C_P626_F	Y	cyclin-dependent kinase inhibitor 1C (p57, Kip2) (CDKN1C)	-626
CDKN2B_E220_F	Y	cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 1	220
CEBPA_P1163_R	Y	CCAAT/enhancer binding protein (C/EBP), alpha (CEBPA)	.
CEBPA_P706_F	Y	CCAAT/enhancer binding protein (C/EBP), alpha (CEBPA)	293
CFTR_P115_F	Y	cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR)	-115
CHFR_P501_F	Y	checkpoint with forkhead and ring finger domains (CHFR)	-501

Supplementary Table 3 (cont.)

CHFR_P635_R	Y	checkpoint with forkhead and ring finger domains (CHFR)	-635
COL18A1_P365_R	Y	collagen, type XVIII, alpha 1 (COL18A1), transcript variant 3	-365
COL4A3_E205_R	Y	collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 6	205
COL4A3_P545_F	Y	collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 6	-545
COL6A1_P283_F	Y	collagen, type VI, alpha 1 (COL6A1)	-283
COL6A1_P425_F	Y	collagen, type VI, alpha 1 (COL6A1)	-425
COMT_E401_F	N	catechol-O-methyltransferase (COMT), transcript variant S-COMT	-195
COPG2_P298_F	Y	coatomer protein complex, subunit gamma 2 (COPG2)	-298
CPNE1_P138_F	Y	copine I (CPNE1), transcript variant 4	-138
CSK_P740_R	Y	c-src tyrosine kinase (CSK)	-740
CSTB_E410_F	Y	cystatin B (stefin B) (CSTB)	410
CTGF_E156_F	Y	connective tissue growth factor (CTGF)	156
CTNNA1_P185_R	Y	catenin (cadherin-associated protein), alpha 1, 102kDa (CTNNA1)	-185
CTNNA1_P382_R	Y	catenin (cadherin-associated protein), alpha 1, 102kDa (CTNNA1)	-382
CTSH_E157_R	Y	cathepsin H (CTSH), transcript variant 2	157
CTSH_P238_F	Y	cathepsin H (CTSH), transcript variant 2	-238
CTSL_P81_F	Y	cathepsin L (CTSL), transcript variant 1	-81
CYP1A1_P382_F	Y	cytochrome P450, family 1, subfamily A, polypeptide 1 (CYP1A1)	-382
CYP1B1_E83_R	Y	cytochrome P450, family 1, subfamily B, polypeptide 1 (CYP1B1)	83
CYP1B1_P212_F	Y	cytochrome P450, family 1, subfamily B, polypeptide 1 (CYP1B1)	-212
DAB2_P35_F	Y	disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila) (DAB2)	-35
DAB2_P468_F	Y	disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila) (DAB2)	-468
DAB2IP_P9_F	Y	DAB2 interacting protein (DAB2IP), transcript variant 1	-9
DAPK1_P10_F	Y	death-associated protein kinase 1 (DAPK1)	-10
DDR1_E23_R	Y	discoidin domain receptor family, member 1 (DDR1), transcript variant 2	23
DHCR24_P406_R	Y	24-dehydrocholesterol reductase (DHCR24)	-406
DKFZP564O0823_E45_F	Y	DKFZP564O0823 protein (DKFZP564O0823)	45
DLL1_P386_F	Y	delta-like 1 (Drosophila) (DLL1)	-386
DNMT1_P100_R	Y	DNA (cytosine-5-)-methyltransferase 1 (DNMT1)	-100
DSP_P36_F	Y	desmoplakin (DSP), transcript variant 1	-36
DSP_P440_R	Y	desmoplakin (DSP), transcript variant 1	-440
DST_E31_F	Y	dystonin (DST), transcript variant 1eB	31
DST_P262_R	Y	dystonin (DST), transcript variant 1eB	-262
DUSP4_E61_F	Y	dual specificity phosphatase 4 (DUSP4), transcript variant 1	61
DUSP4_P925_R	Y	dual specificity phosphatase 4 (DUSP4), transcript variant 1	-925
E2F3_P840_R	Y	E2F transcription factor 3 (E2F3)	-840
EDN1_P39_R	Y	endothelin 1 (EDN1)	-39
EFNA1_P591_R	Y	ephrin-A1 (EFNA1), transcript variant 2	-591
EFNA1_P7_F	Y	ephrin-A1 (EFNA1), transcript variant 2	-7
EFNB3_P442_R	Y	ephrin-B3 (EFNB3)	-442
EGFR_E295_R	Y	epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) (EGFR), transcript variant 1	295
EGFR_P260_R	Y	epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) (EGFR), transcript variant 1	-260

Supplementary Table 3 (cont.)

EGR4_P479_F	Y	early growth response 4 (EGR4)	-479
EIF2AK2_E103_R	Y	eukaryotic translation initiation factor 2-alpha kinase 2 (EIF2AK2)	103
EIF2AK2_P313_F	Y	eukaryotic translation initiation factor 2-alpha kinase 2 (EIF2AK2)	-313
ENC1_P484_R	Y	ectodermal-neural cortex (with BTB-like domain) (ENC1)	-484
EPHA1_E46_R	Y	EPH receptor A1 (EPHA1)	46
EPHA3_E156_R	Y	EPH receptor A3 (EPHA3), transcript variant 1	156
EPHA3_P106_R	Y	EPH receptor A3 (EPHA3), transcript variant 1	-106
EPHA7_E6_F	Y	EPH receptor A7 (EPHA7)	6
EPHA7_P205_R	Y	EPH receptor A7 (EPHA7)	-205
EPHA8_P256_F	Y	EPH receptor A8 (EPHA8), transcript variant 1	-256
EPHB1_P503_F	Y	EPH receptor B1 (EPHB1)	-503
EPHB2_E297_F	Y	EPH receptor B2 (EPHB2), transcript variant 2	297
EPHB3_E0_F	Y	EPH receptor B3 (EPHB3)	0
EPHB3_P569_R	Y	EPH receptor B3 (EPHB3)	-569
EPHB4_E476_R	Y	EPH receptor B4 (EPHB4)	476
EPHB4_P313_R	Y	EPH receptor B4 (EPHB4)	-313
EPHB6_E342_F	Y	EPH receptor B6 (EPHB6)	342
EPHB6_P827_R	Y	EPH receptor B6 (EPHB6)	-827
EPS8_E231_F	Y	epidermal growth factor receptor pathway substrate 8 (EPS8)	231
ERBB2_P59_R	Y	v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) (ERBB2), transcript variant 2	-59
ERBB3_E331_F	Y	v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) (ERBB3), transcript variant 1	331
ERBB3_P870_R	Y	v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) (ERBB3), transcript variant 1	-870
ERBB4_P255_F	Y	v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian) (ERBB4)	-255
ERBB4_P541_F	Y	v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian) (ERBB4)	-541
ERCC1_P354_F	Y	excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence) (ERCC1), transcript	-354
ESR2_E66_F	Y	estrogen receptor 2 (ER beta) (ESR2)	66
ESR2_P162_F	Y	estrogen receptor 2 (ER beta) (ESR2)	-162
ETS1_P559_R	Y	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1)	-559
ETS2_P684_F	Y	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2)	-684
ETS2_P835_F	Y	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2)	-835
EVI1_E47_R	Y	ecotropic viral integration site 1 (EVI1)	47
EVI1_P30_R	Y	ecotropic viral integration site 1 (EVI1)	-30
EXT1_E197_F	Y	exostoses (multiple) 1 (EXT1)	197
F2R_P88_F	Y	coagulation factor II (thrombin) receptor (F2R)	-88
FABP3_P598_F	Y	fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3)	-598
FANCF_P13_F	Y	Fanconi anemia, complementation group F (FANCF)	-13
FANCG_E207_R	Y	Fanconi anemia, complementation group G (FANCG)	207
FAS_P65_F	Y	Fas (TNF receptor superfamily, member 6) (FAS), transcript variant 1	-65
FASTK_P257_F	Y	Fas-activated serine/threonine kinase (FASTK), transcript variant 4	-257
FER_E119_F	N	fer (fps/fes related) tyrosine kinase (phosphoprotein NCP94) (FER)	119
FES_E34_R	Y	feline sarcoma oncogene (FES)	34
FGF3_E198_R	Y	fibroblast growth factor 3 (murine mammary tumor virus integration site (v-int-2) oncogene homolog) (FGF3)	198

Supplementary Table 3 (cont.)

FGF5_E16_F	Y	fibroblast growth factor 5 (FGF5), transcript variant 1	16
FGF5_P238_R	Y	fibroblast growth factor 5 (FGF5), transcript variant 1	-238
FGF8_E183_F	Y	fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant B	183
FGF8_P473_F	Y	fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant B	-473
FGFR1_E317_F	Y	fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 1	317
FGFR2_P266_R	Y	fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome,	-266
FGFR3_E297_R	Y	fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 2	297
FHIT_E19_R	Y	fragile histidine triad gene (FHIT)	19
FHIT_P93_R	Y	fragile histidine triad gene (FHIT)	-93
FLI1_E29_F	Y	Friend leukemia virus integration 1 (FLI1)	29
FLT1_E444_F	Y	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) (FLT1)	444
FLT1_P302_F	Y	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) (FLT1)	-302
FLT1_P615_R	Y	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) (FLT1)	-615
FLT3_E326_R	Y	fms-related tyrosine kinase 3 (FLT3)	326
FLT3_P302_F	Y	fms-related tyrosine kinase 3 (FLT3)	-302
FLT4_E206_F	Y	fms-related tyrosine kinase 4 (FLT4), transcript variant 2	206
FLT4_P180_R	Y	fms-related tyrosine kinase 4 (FLT4), transcript variant 2	-180
FN1_E469_F	Y	fibronectin 1 (FN1), transcript variant 7	469
FN1_P229_R	Y	fibronectin 1 (FN1), transcript variant 7	-229
FZD7_E296_F	Y	frizzled homolog 7 (Drosophila) (FZD7)	296
FZD9_P15_R	Y	frizzled homolog 9 (Drosophila) (FZD9)	-15
FZD9_P175_F	Y	frizzled homolog 9 (Drosophila) (FZD9)	-175
GALR1_E52_F	Y	galanin receptor 1 (GALR1)	52
GAS1_E22_F	Y	growth arrest-specific 1 (GAS1)	22
GAS1_P754_R	Y	growth arrest-specific 1 (GAS1)	-754
GAS7_E148_F	Y	growth arrest-specific 7 (GAS7), transcript variant a	148
GATA6_P21_R	Y	GATA binding protein 6 (GATA6)	-21
GATA6_P726_F	Y	GATA binding protein 6 (GATA6)	-726
GFI1_P45_R	Y	growth factor independent 1 (GFI1)	-45
GJB2_E43_F	Y	gap junction protein, beta 2, 26kDa (connexin 26) (GJB2)	43
GJB2_P791_R	Y	gap junction protein, beta 2, 26kDa (connexin 26) (GJB2)	-791
GNMT_E126_F	Y	glycine N-methyltransferase (GNMT)	126
GPX3_E178_F	Y	glutathione peroxidase 3 (plasma) (GPX3)	178
GRB10_E85_R	Y	growth factor receptor-bound protein 10 (GRB10), transcript variant 4	85
GRB10_P260_F	Y	growth factor receptor-bound protein 10 (GRB10), transcript variant 4	-260
GSTP1_P74_F	Y	glutathione S-transferase pi (GSTP1)	-74
GSTP1_seq_38_S153_R	Y	glutathione S-transferase pi (GSTP1)	-48
GUCY2D_E419_R	Y	guanylate cyclase 2D, membrane (retina-specific) (GUCY2D)	419
HBEGF_P32_R	Y	heparin-binding EGF-like growth factor (HBEGF)	-32
HCK_P46_R	Y	hemopoietic cell kinase (HCK)	-46
HDAC11_P556_F	Y	histone deacetylase 11 (HDAC11)	-556
HFE_E273_R	Y	hemochromatosis (HFE), transcript variant 10	273

Supplementary Table 3 (cont.)

HHIP_E94_F	Y	hedgehog interacting protein (HHIP)	323
HIC2_P498_F	Y	hypermethylated in cancer 2 (HIC2)	-498
HIC2_P528_R	Y	hypermethylated in cancer 2 (HIC2)	-528
HIF1A_P488_F	Y	hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) (HIF1A), transcript variant 1	-488
HLA-F_E402_F	Y	major histocompatibility complex, class I, F (HLA-F)	402
HLF_E192_F	Y	hepatic leukemia factor (HLF)	192
HOXA11_E35_F	Y	homeo box A11 (HOXA11)	35
HOXA11_P92_R	Y	homeo box A11 (HOXA11)	-92
HOXB13_E21_F	Y	homeo box B13 (HOXB13)	21
HOXB13_P17_R	Y	homeo box B13 (HOXB13)	-17
HPSE_P29_F	Y	heparanase (HPSE)	-29
HPSE_P93_F	Y	heparanase (HPSE)	-93
HRASLS_E72_R	Y	HRAS-like suppressor (HRASLS)	72
HSD17B12_E145_R	Y	hydroxysteroid (17-beta) dehydrogenase 12 (HSD17B12)	145
HSD17B12_P97_F	Y	hydroxysteroid (17-beta) dehydrogenase 12 (HSD17B12)	-97
HTR2A_P853_F	N	5-hydroxytryptamine (serotonin) receptor 2A (HTR2A)	-853
ICA1_P72_R	Y	islet cell autoantigen 1, 69kDa (ICA1), transcript variant 2	-72
ICAM1_E242_F	Y	intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1)	242
ICAM1_P119_R	Y	intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1)	-119
ID1_P659_R	Y	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1), transcript variant 1	-659
ID1_P880_F	Y	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1), transcript variant 1	-880
IFNGR1_P307_F	Y	interferon gamma receptor 1 (IFNGR1)	-307
IFNGR2_E164_F	Y	interferon gamma receptor 2 (interferon gamma transducer 1) (IFNGR2)	164
IGF1R_E186_R	Y	insulin-like growth factor 1 receptor (IGF1R)	186
IGF1R_P325_R	Y	insulin-like growth factor 1 receptor (IGF1R)	-325
IGF2_P1036_R	Y	insulin-like growth factor 2 (somatomedin A) (IGF2)	-709
IGFBP3_E65_R	Y	insulin-like growth factor binding protein 3 (IGFBP3), transcript variant 2	65
IGFBP3_P1035_F	Y	insulin-like growth factor binding protein 3 (IGFBP3), transcript variant 2	-1035
IGFBP6_P328_R	Y	insulin-like growth factor binding protein 6 (IGFBP6)	-328
IGFBP7_P371_F	Y	insulin-like growth factor binding protein 7 (IGFBP7)	-371
IGSF4_P454_F	Y	immunoglobulin superfamily, member 4 (IGSF4)	-454
IGSF4C_P533_R	Y	immunoglobulin superfamily, member 4C (IGSF4C)	-533
IHH_E186_F	Y	Indian hedgehog homolog (Drosophila) (IHH)	186
IHH_P246_R	Y	Indian hedgehog homolog (Drosophila) (IHH)	-246
IHH_P529_F	Y	Indian hedgehog homolog (Drosophila) (IHH)	-529
IL11_P11_R	Y	interleukin 11 (IL11)	-11
IL12A_E287_R	Y	interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35) (IL12A)	287
IL17RB_P788_R	Y	interleukin 17 receptor B (IL17RB), transcript variant 1	392
IMPACT_P234_R	Y	Impact homolog (mouse) (IMPACT)	-234
INHA_P1144_R	Y	inhibin, alpha (INHA)	.
INHA_P1189_F	Y	inhibin, alpha (INHA)	.
INSR_P1063_R	Y	insulin receptor (INSR)	-1063

Supplementary Table 3 (cont.)

IRAK3_E130_F	Y	interleukin-1 receptor-associated kinase 3 (IRAK3)	130
IRAK3_P13_F	Y	interleukin-1 receptor-associated kinase 3 (IRAK3)	-13
IRF5_P123_F	Y	interferon regulatory factor 5 (IRF5), transcript variant 2	-123
IRF7_P277_R	Y	interferon regulatory factor 7 (IRF7), transcript variant b	-277
ISL1_E87_R	Y	ISL1 transcription factor, LIM/homeodomain, (islet-1) (ISL1)	132
ISL1_P554_F	Y	ISL1 transcription factor, LIM/homeodomain, (islet-1) (ISL1)	-554
ITGA2_E120_F	Y	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) (ITGA2)	120
ITGA2_P26_R	Y	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) (ITGA2)	-26
ITGA6_P298_R	Y	integrin, alpha 6 (ITGA6)	-298
ITGB1_P451_F	Y	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1C-1	-451
ITGB4_E144_F	Y	integrin, beta 4 (ITGB4), transcript variant 1	144
ITPR2_P804_F	Y	inositol 1,4,5-triphosphate receptor, type 2 (ITPR2)	-804
ITPR3_E86_R	Y	inositol 1,4,5-triphosphate receptor, type 3 (ITPR3)	86
JAG1_P66_F	Y	jagged 1 (Alagille syndrome) (JAG1)	-66
JAG2_E54_F	Y	jagged 2 (JAG2), transcript variant 2	54
JAG2_P264_F	Y	jagged 2 (JAG2), transcript variant 2	-264
JAK2_P772_R	Y	Janus kinase 2 (a protein tyrosine kinase) (JAK2)	-772
JUNB_P1149_R	Y	jun B proto-oncogene (JUNB)	-1149
KCNQ1_E349_R	Y	potassium voltage-gated channel, KQT-like subfamily, member 1 (KCNQ1), transcript variant 3	349
KIAA1804_P689_R	Y	mixed lineage kinase 4 (KIAA1804)	-689
KIT_P367_R	Y	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT)	-367
KIT_P405_F	Y	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT)	-405
KLF5_E190_R	Y	Kruppel-like factor 5 (intestinal) (KLF5)	190
KLF5_P13_F	Y	Kruppel-like factor 5 (intestinal) (KLF5)	-13
L1CAM_P148_R	Y	L1 cell adhesion molecule (L1CAM), transcript variant 2	-148
LAMB1_E144_R	Y	laminin, beta 1 (LAMB1)	144
LAMC1_E466_R	Y	laminin, gamma 1 (formerly LAMB2) (LAMC1)	466
LAMC1_P808_F	Y	laminin, gamma 1 (formerly LAMB2) (LAMC1)	-808
LIF_E208_F	Y	leukemia inhibitory factor (cholinergic differentiation factor) (LIF)	208
LIG4_P194_F	Y	ligase IV, DNA, ATP-dependent (LIG4), transcript variant 1	-194
LMO1_P169_F	Y	LIM domain only 1 (rhombotin 1) (LMO1)	-169
LOX_P71_F	Y	lysyl oxidase (LOX)	-71
LRP2_E20_F	Y	low density lipoprotein-related protein 2 (LRP2)	20
LRRC32_P865_R	Y	leucine rich repeat containing 32 (LRRC32)	-865
LYN_P241_F	Y	v-yes-1 Yamaguchi sarcoma viral related oncogene homolog (LYN)	-241
MAF_E77_R	Y	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) (MAF), transcript variant 1	77
MAF_P826_R	Y	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) (MAF), transcript variant 1	-826
MAP2K6_E297_F	N	mitogen-activated protein kinase kinase 6 (MAP2K6), transcript variant 1	297
MAPK12_E165_R	Y	mitogen-activated protein kinase 12 (MAPK12)	165
MAPK12_P416_F	Y	mitogen-activated protein kinase 12 (MAPK12)	-416
MATK_P64_F	Y	megakaryocyte-associated tyrosine kinase (MATK), transcript variant 1	-64
MCAM_P169_R	Y	melanoma cell adhesion molecule (MCAM)	-169

Supplementary Table 3 (cont.)

MCAM_P265_R	Y	melanoma cell adhesion molecule (MCAM)	-265
MCC_E23_R	Y	mutated in colorectal cancers (MCC)	23
MCC_P196_R	Y	mutated in colorectal cancers (MCC)	-196
MCM2_P241_R	Y	MCM2 minichromosome maintenance deficient 2, mitotin (S. cerevisiae) (MCM2)	-241
MCM2_P260_F	Y	MCM2 minichromosome maintenance deficient 2, mitotin (S. cerevisiae) (MCM2)	-260
MDR1_seq_42_S300_R	Y	ATP-binding cassette, sub-family B (MDR/TAP), member 1 (ABCB1)	.
MDS1_E45_F	Y	myelodysplasia syndrome 1 (MDS1)	45
MGMT_P272_R	Y	O-6-methylguanine-DNA methyltransferase (MGMT)	-272
MGMT_P281_F	Y	O-6-methylguanine-DNA methyltransferase (MGMT)	-281
MLF1_P97_F	Y	myeloid leukemia factor 1 (MLF1)	-97
MLH1_P381_F	Y	mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1)	197
MLH3_E72_F	Y	mutL homolog 3 (E. coli) (MLH3)	72
MLH3_P25_F	Y	mutL homolog 3 (E. coli) (MLH3)	-25
MLLT3_E93_R	Y	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 (MLLT3)	93
MLLT4_P1400_F	Y	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4 (MLLT4)	-1400
MLLT6_P957_F	Y	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6 (MLLT6)	-957
MMP2_E21_R	Y	matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2)	21
MMP9_P237_R	N	matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) (MMP9)	-237
MT1A_P49_R	Y	metallothionein 1A (functional) (MT1A)	-49
MTA1_P478_F	Y	metastasis associated 1 (MTA1)	-478
MXI1_P75_R	Y	MAX interactor 1 (MXI1), transcript variant 1	-75
MYB_P673_R	Y	v-myb myeloblastosis viral oncogene homolog (avian) (MYB)	-673
MYBL2_P211_F	Y	v-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2)	-211
MYBL2_P354_F	Y	v-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2)	-354
MYCL1_P502_R	Y	v-myc myelocytomatosis viral oncogene homolog 1, lung carcinoma derived (avian) (MYCL1), transcript variant 1	-502
MYCN_E77_R	Y	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) (MYCN)	77
MYCN_P464_R	Y	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) (MYCN)	-464
MYH11_P236_R	Y	myosin, heavy polypeptide 11, smooth muscle (MYH11), transcript variant SM2	-236
MYLK_E132_R	Y	myosin, light polypeptide kinase (MYLK), transcript variant 1	132
NCL_P840_R	Y	nucleolin (NCL)	-840
NEO1_P1067_F	Y	neogenin homolog 1 (chicken) (NEO1)	-1067
NFKB2_P709_R	Y	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2)	-709
NGFB_E353_F	Y	nerve growth factor, beta polypeptide (NGFB)	353
NGFR_E328_F	Y	nerve growth factor receptor (TNFR superfamily, member 16) (NGFR)	328
NKX3-1_P146_F	Y	NK3 transcription factor related, locus 1 (Drosophila) (NKX3-1)	-146
NOTCH1_E452_R	Y	Notch homolog 1, translocation-associated (Drosophila) (NOTCH1)	452
NOTCH1_P1198_F	Y	Notch homolog 1, translocation-associated (Drosophila) (NOTCH1)	-1198
NPY_P91_F	Y	neuropeptide Y (NPY)	-91
NQO1_E74_R	Y	NAD(P)H dehydrogenase, quinone 1 (NQO1), transcript variant 3	74
NQO1_P345_R	N	NAD(P)H dehydrogenase, quinone 1 (NQO1), transcript variant 3	-345
NR2F6_E375_R	Y	nuclear receptor subfamily 2, group F, member 6 (NR2F6)	375
NRAS_P103_R	Y	neuroblastoma RAS viral (v-ras) oncogene homolog (NRAS)	-103

Supplementary Table 3 (cont.)

NRG1_E74_F	Y	neuregulin 1 (NRG1), transcript variant HRG-beta3	74
NTRK2_P10_F	Y	neurotrophic tyrosine kinase, receptor, type 2 (NTRK2), transcript variant e	-271
NTRK2_P395_R	Y	neurotrophic tyrosine kinase, receptor, type 2 (NTRK2), transcript variant e	-656
NTRK3_E131_F	Y	neurotrophic tyrosine kinase, receptor, type 3 (NTRK3), transcript variant 2	131
NTSR1_E109_F	Y	neurotensin receptor 1 (high affinity) (NTSR1)	109
OAT_P465_F	Y	ornithine aminotransferase (gyrate atrophy) (OAT), nuclear gene encoding mitochondrial protein	-465
ODC1_P424_F	Y	ornithine decarboxylase 1 (ODC1)	-424
ONECUT2_E96_F	Y	one cut domain, family member 2 (ONECUT2)	96
P2RX7_E323_R	Y	purinergic receptor P2X, ligand-gated ion channel, 7 (P2RX7), transcript variant 2	323
PAX6_E129_F	Y	paired box gene 6 (aniridia, keratitis) (PAX6), transcript variant 2	129
PAX6_P1121_F	Y	paired box gene 6 (aniridia, keratitis) (PAX6), transcript variant 2	-1121
PAX6_P50_R	Y	paired box gene 6 (aniridia, keratitis) (PAX6), transcript variant 2	-50
PCDH1_E22_F	Y	protocadherin 1 (cadherin-like 1) (PCDH1), transcript variant 2	22
PCGF4_P760_R	Y	polycomb group ring finger 4 (PCGF4)	-760
PCGF4_P92_R	Y	polycomb group ring finger 4 (PCGF4)	-92
PDE1B_E141_F	Y	phosphodiesterase 1B, calmodulin-dependent (PDE1B)	141
PDE1B_P263_R	Y	phosphodiesterase 1B, calmodulin-dependent (PDE1B)	-263
PDGFA_P841_R	Y	PREDICTED: platelet-derived growth factor alpha polypeptide, transcript variant 1 (PDGFA)	-841
PDGFRA_P1429_F	Y	platelet-derived growth factor receptor, alpha polypeptide (PDGFRA)	-1429
PGF_E33_F	Y	placental growth factor, vascular endothelial growth factor-related protein (PGF)	33
PHLDA2_E159_R	Y	pleckstrin homology-like domain, family A, member 2 (PHLDA2)	159
PKD2_P287_R	Y	polycystic kidney disease 2 (autosomal dominant) (PKD2)	-287
PKD2_P336_R	Y	polycystic kidney disease 2 (autosomal dominant) (PKD2)	-336
PLAU_P11_F	Y	plasminogen activator, urokinase (PLAU)	-11
PLAU_P176_R	Y	plasminogen activator, urokinase (PLAU)	-176
PLAUR_E123_F	Y	plasminogen activator, urokinase receptor (PLAUR), transcript variant 3	123
PLAUR_P82_F	Y	plasminogen activator, urokinase receptor (PLAUR), transcript variant 3	-82
PLXDC1_E71_F	Y	plexin domain containing 1 (PLXDC1)	71
PLXDC1_P236_F	Y	plexin domain containing 1 (PLXDC1)	-236
PLXDC2_E337_F	Y	plexin domain containing 2 (PLXDC2)	337
PODXL_P1341_R	Y	podocalyxin-like (PODXL), transcript variant 1	-1341
POMC_E254_F	Y	proopiomelanocortin (adrenocorticotropin/ beta-lipotropin/ alpha-melanocyte stimulating hormone/ beta-melanocyte stimulating hormone/ beta-	254
POMC_P53_F	Y	proopiomelanocortin (adrenocorticotropin/ beta-lipotropin/ alpha-melanocyte stimulating hormone/ beta-melanocyte stimulating hormone/ beta-	-53
PPARG_E178_R	Y	peroxisome proliferative activated receptor, gamma (PPARG), transcript variant 4	178
PPP2R1B_P268_R	Y	protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), beta isoform (PPP2R1B), transcript variant 2	-268
PRKAR1A_P337_R	Y	protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1) (PRKAR1A), transcript variant 3	-337
PROK2_E0_F	Y	prokineticin 2 (PROK2)	0
PROK2_P390_F	Y	prokineticin 2 (PROK2)	-390
PTCH_E42_F	Y	patched homolog (Drosophila) (PTCH)	42
PTCH2_P37_F	Y	patched homolog 2 (Drosophila) (PTCH2)	-37
PTEN_P438_F	Y	phosphatase and tensin homolog (mutated in multiple advanced cancers 1) (PTEN)	-438
PTGS1_E80_F	Y	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1), transcript variant 1	80

Supplementary Table 3 (cont.)

PTGS1_P2_F	Y	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1), transcript variant 1	-2
PTGS2_P524_R	Y	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (PTGS2)	-524
PTK2_P735_R	Y	PTK2 protein tyrosine kinase 2 (PTK2), transcript variant 2	-735
PTK2B_P673_R	Y	PTK2B protein tyrosine kinase 2 beta (PTK2B), transcript variant 4	.
PTPNS1_E433_R	Y	protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1)	433
PTPNS1_P301_R	Y	protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1)	-301
PTPRF_E178_R	Y	protein tyrosine phosphatase, receptor type, F (PTPRF), transcript variant 1	178
PTPRG_E40_R	Y	protein tyrosine phosphatase, receptor type, G (PTPRG)	40
PTPRG_P476_F	Y	protein tyrosine phosphatase, receptor type, G (PTPRG)	-476
PTPRO_E56_F	Y	protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 2	56
PURA_P928_R	Y	purine-rich element binding protein A (PURA)	-928
PYCARD_E87_F	Y	PYD and CARD domain containing (PYCARD), transcript variant 2	87
RAB32_E314_R	Y	RAB32, member RAS oncogene family (RAB32)	314
RAF1_P330_F	Y	v-raf-1 murine leukemia viral oncogene homolog 1 (RAF1)	-330
RARB_P60_F	Y	retinoic acid receptor, beta (RARB), transcript variant 2	-60
RARRES1_E235_F	Y	retinoic acid receptor responder (tazarotene induced) 1 (RARRES1), transcript variant 1	235
RASGRF1_P768_F	Y	Ras protein-specific guanine nucleotide-releasing factor 1 (RASGRF1), transcript variant 1	-768
RBL2_P250_R	Y	retinoblastoma-like 2 (p130) (RBL2)	-250
RBP1_E158_F	Y	retinol binding protein 1, cellular (RBP1)	158
RET_P717_F	N	ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 4	-717
RET_seq_53_S374_F	Y	ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 4	-446
RET_seq_54_S260_F	Y	ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 4	11
RHOC_P536_F	Y	ras homolog gene family, member C (RHOC)	-536
RIPK2_E123_F	Y	receptor-interacting serine-threonine kinase 2 (RIPK2)	123
RIPK4_E166_F	Y	receptor-interacting serine-threonine kinase 4 (RIPK4)	166
RIPK4_P172_F	Y	receptor-interacting serine-threonine kinase 4 (RIPK4)	-172
ROR1_P6_F	Y	receptor tyrosine kinase-like orphan receptor 1 (ROR1)	-6
ROR2_E112_F	Y	receptor tyrosine kinase-like orphan receptor 2 (ROR2)	112
ROR2_P317_R	Y	receptor tyrosine kinase-like orphan receptor 2 (ROR2)	-317
RYK_P493_F	Y	PREDICTED: RYK receptor-like tyrosine kinase (RYK)	-493
SEMA3B_P110_R	N	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B (SEMA3B), transcript variant 1	-110
SEMA3F_P692_R	Y	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F (SEMA3F)	-692
SEZ6L_P249_F	Y	seizure related 6 homolog (mouse)-like (SEZ6L)	-249
SEZ6L_P299_F	Y	seizure related 6 homolog (mouse)-like (SEZ6L)	-299
SGCE_E149_F	Y	sarcoglycan, epsilon (SGCE)	-359
SHB_P473_R	Y	Src homology 2 domain containing adaptor protein B (SHB)	-473
SHH_P104_R	Y	sonic hedgehog homolog (Drosophila) (SHH)	-104
SKI_E465_R	Y	v-ski sarcoma viral oncogene homolog (avian) (SKI)	465
SMAD4_P474_R	Y	SMAD, mothers against DPP homolog 4 (Drosophila) (SMAD4)	-474
SMARCA3_E20_F	Y	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3), transcript variant 2	20
SMARCA3_P109_R	Y	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3), transcript variant 2	-109
SMARCA4_P362_R	Y	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 (SMARCA4)	-362

Supplementary Table 3 (cont.)

SMO_E57_F	Y	smoothened homolog (Drosophila) (SMO)	57
SMO_P455_R	Y	smoothened homolog (Drosophila) (SMO)	-455
SOX1_P1018_R	Y	SRY (sex determining region Y)-box 1 (SOX1)	-1018
SYK_E372_F	Y	spleen tyrosine kinase (SYK)	372
TAL1_E122_F	Y	T-cell acute lymphocytic leukemia 1 (TAL1)	122
TCF7L2_E411_F	Y	transcription factor 7-like 2 (T-cell specific, HMG-box) (TCF7L2)	411
TCF7L2_P193_R	Y	transcription factor 7-like 2 (T-cell specific, HMG-box) (TCF7L2)	-193
TERT_E20_F	Y	telomerase reverse transcriptase (TERT), transcript variant 2	20
TES_E172_F	Y	testis derived transcript (3 LIM domains) (TES), transcript variant 1	172
TES_P182_F	Y	testis derived transcript (3 LIM domains) (TES), transcript variant 1	-182
TESK2_P252_R	Y	testis-specific kinase 2 (TESK2)	-252
TFAP2C_E260_F	Y	transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma) (TFAP2C)	260
TFPI2_E141_F	Y	tissue factor pathway inhibitor 2 (TFPI2)	141
TGFA_P558_F	Y	transforming growth factor, alpha (TGFA)	-558
TGFA_P642_R	Y	transforming growth factor, alpha (TGFA)	-642
TGFB2_P632_F	Y	transforming growth factor, beta 2 (TGFB2)	-632
TGFBI_P31_R	Y	transforming growth factor, beta-induced, 68kDa (TGFBI)	-31
TGFBR3_E188_R	Y	transforming growth factor, beta receptor III (betaglycan, 300kDa) (TGFBR3)	188
TGFBR3_P429_F	Y	transforming growth factor, beta receptor III (betaglycan, 300kDa) (TGFBR3)	-429
THBS1_E207_R	Y	thrombospondin 1 (THBS1)	207
THBS1_P500_F	Y	thrombospondin 1 (THBS1)	-500
THBS2_E129_F	Y	thrombospondin 2 (THBS2)	129
TIAM1_P188_R	Y	T-cell lymphoma invasion and metastasis 1 (TIAM1)	-188
TIMP2_E394_R	Y	PREDICTED: TIMP metallopeptidase inhibitor 2 (TIMP2)	394
TIMP3_seq_7_S38_F	Y	TIMP metallopeptidase inhibitor 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3)	.
TJP1_P326_R	Y	tight junction protein 1 (zona occludens 1) (TJP1), transcript variant 2	-326
TJP1_P390_F	Y	tight junction protein 1 (zona occludens 1) (TJP1), transcript variant 2	-390
TK1_P62_R	Y	thymidine kinase 1, soluble (TK1)	-62
TMEFF1_E180_R	Y	transmembrane protein with EGF-like and two follistatin-like domains 1 (TMEFF1)	180
TMEFF1_P234_F	Y	transmembrane protein with EGF-like and two follistatin-like domains 1 (TMEFF1)	-234
TMEFF2_E94_R	Y	transmembrane protein with EGF-like and two follistatin-like domains 2 (TMEFF2)	94
TMEM63A_E63_F	Y	transmembrane protein 63A (TMEM63A)	63
TNC_P57_F	Y	tenascin C (hexabrachion) (TNC)	-57
TNFRSF10A_P171_F	Y	tumor necrosis factor receptor superfamily, member 10a (TNFRSF10A)	70
TNFRSF10A_P91_F	Y	tumor necrosis factor receptor superfamily, member 10a (TNFRSF10A)	-10
TNFRSF10B_E198_R	Y	tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B), transcript variant 2	198
TNFRSF10B_P108_R	Y	tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B), transcript variant 2	-108
TNFRSF10C_E109_F	Y	tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C)	109
TNFRSF10D_E27_F	Y	tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain (TNFRSF10D)	27
TNFRSF1B_E5_F	Y	tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B)	5
TNFRSF1B_P167_F	Y	tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B)	-167
TP73_E155_F	Y	tumor protein p73 (TP73)	155

Supplementary Table 3 (cont.)

TP73_P496_F	Y	tumor protein p73 (TP73)	-496
TPEF_seq_44_S36_F	Y	transmembrane protein with EGF-like and two follistatin-like domains 2 (TMEFF2)	442
TRAF4_P372_F	Y	TNF receptor-associated factor 4 (TRAF4), transcript variant 2	-372
TRIP6_E33_F	Y	thyroid hormone receptor interactor 6 (TRIP6)	33
TSG101_P139_R	Y	tumor susceptibility gene 101 (TSG101)	-139
TSG101_P257_R	Y	tumor susceptibility gene 101 (TSG101)	-257
TUBB3_P364_F	Y	tubulin, beta 3 (TUBB3)	-364
TUBB3_P721_R	Y	tubulin, beta 3 (TUBB3)	-721
TWIST1_E117_R	Y	twist homolog 1 (acrocephalosyndactyly 3; Saethre-Chotzen syndrome) (Drosophila) (TWIST1)	117
TYK2_P494_F	Y	tyrosine kinase 2 (TYK2)	-494
TYRO3_P501_F	N	TYRO3 protein tyrosine kinase (TYRO3)	-501
UBA52_P293_R	Y	ubiquitin A-52 residue ribosomal protein fusion product 1 (UBA52)	-293
UNG_P170_F	Y	uracil-DNA glycosylase (UNG), nuclear gene encoding mitochondrial protein, transcript variant 1	-170
VAV2_E58_F	Y	vav 2 oncogene (VAV2)	58
VAV2_P1182_F	Y	vav 2 oncogene (VAV2)	-1182
VEGFB_P658_F	Y	PREDICTED: vascular endothelial growth factor B (VEGFB)	-658
VIM_P343_R	Y	vimentin (VIM)	-343
VIM_P811_R	Y	vimentin (VIM)	-811
WNT1_E157_F	Y	wingless-type MMTV integration site family, member 1 (WNT1)	157
WNT2_P217_F	Y	wingless-type MMTV integration site family member 2 (WNT2)	-217
WNT2B_P1185_R	Y	wingless-type MMTV integration site family, member 2B (WNT2B), transcript variant WNT-2B2	-1185
WNT5A_E43_F	Y	wingless-type MMTV integration site family, member 5A (WNT5A)	43
WNT5A_P655_F	Y	wingless-type MMTV integration site family, member 5A (WNT5A)	-655
YES1_P216_F	Y	v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1 (YES1)	-216
YES1_P600_F	Y	v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1 (YES1)	-600
ZMYND10_E77_R	Y	zinc finger, MYND-type containing 10 (ZMYND10)	77
ZNF264_E48_R	Y	zinc finger protein 264 (ZNF264)	48
ZP3_E90_F	Y	PREDICTED: zona pellucida glycoprotein 3 (sperm receptor) (ZP3)	90

Supplementary Table 4. List of CpG sites with defined tissue-specific DNA methylation. It is only displayed probes with values over 75% average metylation (orderer from highest to lowest values) for each tissue type of the 511 CpG dinucleotides that showed significant differential DNA methylation between particular tissues.

Bladder (n: 116)	Blood (n: 155)	Bone marrow (n: 136)	Brain (n: 221)	Buccal epithelium (n: 119)	Colon (n: 80)	Esophagus (n: 106)	Liver (n: 109)	Muscle (n: 183)	Pancreas (n: 144)	Prostate (n: 175)	Skin (n: 195)	Stomach (n: 76)
IL1A_E113_R	SERPINB5_P19_R	SFN_E118_F	IL1A_E113_R	CTAG1B_P77_F	IL1A_E113_R	CTAG1B_P77_F	SFN_E118_F	IL1A_E113_R	ZIM3_P451_R	IL1A_E113_R	CTAG1B_P77_F	IL1A_E113_R
S100A12_P1221_R	ZIM3_P451_R	IL1A_E113_R	CTAG1B_P77_F	CDH17_E31_F	ZIM3_P451_R	UGT1A1_E11_F	IL1A_E113_R	UGT1A1_E11_F	IL1A_E113_R	CTAG1B_P77_F	S100A12_P1221_R	CTAG1B_P77_F
ZIM3_P451_R	PRSS8_E134_R	GLI2_E90_F	ZIM3_P451_R	S100A12_P1221_R	EGF_E339_F	FGF6_E294_F	ZIM3_P451_R	RUNX3_P393_R	FGF6_E294_F	S100A12_P1221_R	AGXT_E115_R	EGF_E339_F
UGT1A1_E11_F	GLI2_E90_F	SERPINB5_P19_R	S100A12_P1221_R	P2RX7_P597_F	UGT1A1_E11_F	AGXT_E115_R	CTAG1B_P77_F	MPO_E302_R	KRT5_E196_R	UGT1A1_E11_F	UGT1A1_E11_F	ZIM3_P451_R
CTAG1B_P77_F	EGF_E339_F	ZIM3_P451_R	UGT1A1_E11_F	RUNX3_P393_R	IL10_P348_F	CDH17_E31_F	EGF_E339_F	KRT5_E196_R	ERCC3_P1210_R	IL1A_E113_R	S100A12_P1221_R	
P2RX7_P597_F	CDH17_E31_F	CDH17_E31_F	PI3_P274_R	UGT1A1_E11_F	GLI2_E90_F	LMO2_E148_F	SERPINB5_P19_R	RUNX3_P247_F	ZIM3_P718_R	WRN_P969_F	IL10_P348_F	RUNX3_P393_R
PTPRH_P255_F	P2RX7_P597_F	PRSS8_E134_R	AGXT_P180_F	RUNX3_P247_F	XRCC1_P681_R	IL10_P348_F	PTPRH_P255_F	SERPINB5_P19_R	PI3_P274_R	IL10_P348_F	FGF6_E294_F	FER_P581_F
HSPA2_P162_R	APOA1_P261_F	AATK_P519_R	SFN_E118_F	FGF6_P139_R	FGF6_P139_R	S100A12_P1221_R	KRT5_E196_R	AATK_E63_R	ERCC3_P1210_R	APBA2_P227_F	APBA2_P227_F	IL10_P348_F
KRT5_E196_R	IL1A_E113_R	CTAG1B_P77_F	CDH17_E31_F	FGF6_E294_F	CSF1R_E26_F	P2RX7_P597_F	TRIM29_P261_F	PI3_P274_R	FOSL2_E384_R	AGXT_E115_R	WRN_P969_F	LMO2_E148_F
GLI2_E90_F	CTGF_P693_R	UGT1A1_E11_F	RUNX3_P393_R	HLA-DPA1_E35_R	CTAG1B_P77_F	APBA2_P227_F	HSPA2_P162_R	TMPRSS4_E83_F	HDAC7A_P344_F	LMO2_E148_F	FGF6_P139_R	FGF6_P139_R
PLG_P370_F	UGT1A1_E11_F	EGF_E339_F	TMPRSS4_E83_F	PTPRH_P255_F	ERCC3_P1210_R	TM7SF3_P1068_R	FGF6_E294_F	TRIM29_P261_F	PLG_E406_F	RUNX3_P393_R	PTPRH_P255_F	LTB4R_P163_F
PLG_E406_F	WRN_P969_F	FER_P581_F	AGXT_E115_R	C4B_P191_F	LMO2_E148_F	FGF6_P139_R	GLI2_E90_F	AGXT_E115_R	CYP2E1_P416_F	ABCC2_P88_F	LMO2_E148_F	XRCC1_P681_R
RUNX3_P393_R	TMPRSS4_E83_F	NID1_P677_F	TRIM29_P135_F	APBA2_P227_F	FGF6_E294_F	LMO2_P794_R	S100A12_P1221_R	EVI2A_E420_F	FGF6_P139_R	FGF6_E294_F	C4B_P191_F	ERCC3_P1210_R
PI3_P274_R	TGFB3_E58_R	PTPRH_P255_F	PTPRH_P255_F	ABCC2_P88_F	CPA4_P1265_R	RUNX3_P393_R	WEE1_P924_R	AFF3_P122_F	AATK_E63_R	PTPRH_P255_F	CDH17_E31_F	LMO2_P794_R
FGF6_P139_R	HSPA2_P162_R	ABCC2_P88_F	KRT5_E196_R	AGXT_E115_R	FER_P581_F	AGXT_P180_F	XRCC1_P681_R	CSF1R_E26_F	NID1_P677_F	MAGEC3_E307_F	ERCC3_P1210_R	CPA4_P1265_R
AGXT_E115_R	SFN_E118_F	C4B_P191_F	HLA-DPA1_E35_R	BTK_E64_R	S100A12_P1221_R	IL1A_E113_R	AATK_P519_R	HSPA2_P162_R	AGXT_P180_F	CPA4_P1265_R	HLA-DPA1_E35_R	WRN_P969_F
ABCC2_P88_F	KRT5_E196_R	TRIM29_P261_F	ABCC2_P88_F	AGXT_P180_F	KRT5_E196_R	ERCC3_P1210_R	SLC14A1_P369_R	PLG_E406_F	XRCC1_P681_R	CSF1R_E26_F	THPO_E483_F	BTK_E64_R
IL10_P348_F	NID1_P677_F	CTGF_P693_R	LCN2_P141_R	IL10_P348_F	ZIM3_P718_R	CSF3_E242_R	HTR2A_E10_R	ZIM3_P451_R	LMO2_E148_F	MPO_E302_R	TRPM5_E87_F	P2RX7_P597_F
NID1_P714_R	PTPRH_P255_F	HTR2A_E10_R	THPO_E483_F	TNFSF8_E258_R	LMO2_P794_R	PTPRH_P255_F	FER_P581_F	TRIM29_P135_F	WEE1_P924_R	FGF6_P139_R	TM7SF3_P1068_R	FGF6_E294_F
NID1_P677_F	TRIM29_P261_F	S100A12_P1221_R	CSF1R_E26_F	PLG_E406_F	NID1_P677_F	WRN_P969_F	LMO2_E148_F	LMO2_E148_F	TRIM29_P261_F	XRCC1_P681_R	CPA4_P1265_R	ZIM3_P718_R
SERPINB5_P19_R	C4B_P191_F	XRCC1_P681_R	SERPINB5_P19_R	HTR2A_E10_R	THPO_E483_F	CPA4_P1265_R	TMPRSS4_E83_F	KRT13_P341_R	NDN_P1110_F	NDN_P1110_F	RUNX3_P393_R	TIE1_E66_R
XRCC1_P681_R	S100A12_P1221_R	WRN_P969_F	AFF3_P122_F	WRN_P969_F	NID1_P714_R	THPO_E483_F	ASB4_P52_R	EVI2A_P94_R	APBA2_P227_F	MMP3_P16_R	LMO2_P794_R	PLG_E406_F
AATK_E63_R	ABCC2_P88_F	KRT5_E196_R	NID1_P677_F	LCK_E28_F	GLI2_P295_F	BTK_E64_R	TMPRSS4_P552_F	BTK_E64_R	HLA-DPA1_E35_R	TNFSF8_E258_R	CDH17_P376_F	TNFSF8_E258_R
TRPM5_P979_F	ACVR1_P983_F	P2RX7_P597_F	TRPM5_E87_F	CSF2_E248_R	HLA-DPA1_E35_R	PI3_E107_F	CREBBP_P712_R	CSF2_E248_R	SPI1_P48_F	LMO2_P794_R	PLG_E406_F	UGT1A1_E11_F
SFN_E118_F	LY6G6E_P45_R	APOA1_P261_F	FGF6_P139_R	EPHX1_P22_F	LTB4R_P163_F	PLG_E406_F	FGF7_P44_F	AGXT_P180_F	CSF2_E248_R	P2RX7_P597_F	HSPA2_P162_R	OSM_P188_F
CPA4_P1265_R	CTAG1B_P77_F	TGFB3_E58_R	FER_P581_F	TRPM5_E87_F	NDN_P1110_F	LTB4R_P163_F	TM7SF3_P1068_R	TNFSF8_E258_R	DSG1_E292_F	AFF3_P122_F	ABCC2_P88_F	TRPM5_E87_F
CYP2E1_P416_F	HTR2A_E10_R	TMPRSS4_E83_F	MPO_E302_R	EVI2A_E420_F	RUNX3_P393_R	CSF2_E248_R	ERCC3_P1210_R	LTB4R_P163_F	HSPA2_P162_R	CSF2_E248_R	AFF3_P122_F	APBA2_P227_F
WRN_P969_F	AATK_P519_R	FGF6_E294_F	PSCA_P135_F	LMO2_E148_F	APBA2_P227_F	PIK3R1_P307_F	CSF3_E242_R	PTPRH_P255_F	SLC6A8_P409_F	TM7SF3_P1068_R	CSF3_E242_R	MPL_P62_F
GLI2_P295_F	FGF6_P139_R	SRC_P164_F	FGFR4_P610_F	LMO2_P794_R	PLG_E406_F	CDH17_P376_F	CPA4_P1265_R	PTPN6_P282_R	FGF7_P44_F	TRPM5_E87_F	TNFSF8_E258_R	PLG_P370_F
LMO2_E148_F	PLG_E406_F	FGF6_P139_R	LCK_E28_F	THPO_E483_F	IL1B_P582_R	EVI2A_E420_F	IL10_P348_F	ERCC3_P1210_R	ABCC2_P88_F	OSM_P188_F	CSF2_E248_R	LCK_E28_F
PSCA_P135_F	WEE1_P924_R	ASB4_P52_R	TMPRSS4_P552_F	OSM_P188_F	ACVR1_P983_F	XRCC1_P681_R	IL1RN_E42_F	IL10_P348_F	AGXT_E115_R	TMPRSS4_P552_F	CSF2_P605_F	HDAC7A_P344_F
TRPM5_E87_F	AATK_E63_R	PLG_E406_F	OSM_P188_F	CDH17_P376_F	NPR2_P1093_F	RUNX3_P247_F	FGF6_P139_R	OSM_P188_F	NPR2_P1093_F	LTB4R_P163_F	MAGEC3_E307_F	RUNX3_P247_F
NDN_P1110_F	ASB4_P52_R	CPA4_P1265_R	CSF3_E242_R	ASB4_P52_R	AATK_P519_R	ABCC2_P88_F	IL1B_P582_R	FER_P581_F	LMO2_P794_R	PLG_E406_F	TMPRSS4_P552_F	C4B_P191_F
HTR2A_E10_R	NID1_P714_R	TRPM5_P979_F	CSF2_E248_R	AFF3_P122_F	C4B_P191_F	SPI1_P48_F	AATK_E63_R	HLA-DPA1_E35_R	C4B_P191_F	BTK_E64_R	MAPK10_E26_F	TRPM5_P979_F
THPO_E483_F	AGXT_E115_R	AGXT_E115_R	LTA_P214_R	HDAC7A_P344_F	CSF2_P605_F	CSF2_P605_F	HDAC7A_P344_F	ABCC2_P88_F	DNAJC15_P65_F	IL1B_P582_R	PI3_P274_R	KRT5_E196_R
LCK_E28_F	SLC14A1_P369_R	LY6G6E_P45_R	PI3_E107_F	ACTG2_P346_F	BTK_E64_R	HDAC7A_P344_F	WRN_P969_F	PTHLH_P15_R	P2RX7_P597_F	RUNX3_P247_F	SRC_E100_R	AFF3_P122_F
TMPRSS4_E83_F	GLI2_P295_F	MAPK10_E26_F	TNFSF8_E258_R	CCKAR_E79_F	CSF2_E248_R	IL1B_P582_R	CSF2_E248_R	CPA4_P1265_R	EVI2A_E420_F	GLI2_E90_F	EVI2A_E420_F	GLI2_E90_F
MAGEC3_E307_F	MSSK1_seq_27_S45_F	CYP2E1_P416_F	AIM2_P624_F	PLG_P370_F	WRN_P969_F	EGF_E339_F	KRT13_P341_R	WRN_P969_F	GSTM1_P363_F	ZIM3_P451_R	PTHLH_P757_F	EVI2A_P94_R
TRIM29_P261_F	EPHX1_P22_F	LIMK1_P709_R	NID1_P714_R	LTA_P214_R	HDAC7A_P344_F	TRPM5_E87_F	TRPM5_E87_F	TRPM5_E87_F	APBA2_P305_R	CSF2_P605_F	RUNX3_P247_F	LIMK1_P709_R
HDAC7A_P344_F	KRT13_P341_R	NID1_P714_R	EGF_E339_F	MT1A_P600_F	PLG_P370_F	MPO_E302_R	PI3_P274_R	CYP2E1_P416_F	UGT1A1_E11_F	HDAC7A_P344_F	BTK_E64_R	AATK_P519_R
ERCC3_P1210_R	SRC_P164_F	HSPA2_P162_R	FGF6_E294_F	CSF3_E242_R	AGXT_E115_R	LTA_P214_R	CSF2_P605_F	LTA_P214_R	AATK_P519_R	LCK_E28_F	LCK_E28_F	HTR2A_E10_R
PIK3R1_P307_F	CPA4_P1265_R	ASB4_E89_F	SRC_P164_F	TM7SF3_P1068_R	MPO_E302_R	HTR2A_E10_R	CSF1R_E26_F	SRC_E100_R	TNFRSF1A_P678_F	NID1_P714_R	MPO_E302_R	HOXB2_P488_R
LTB4R_P163_F	TRPM5_P979_F	NDN_P1110_F	RUNX3_P247_F	CSF2_P605_F	AFF3_P122_F	HLA-DPA1_E35_R	PSCA_P135_F	TBX1_P520_F	FER_P581_F	HLA-DPA1_E35_R	AGXT_P180_F	GSTM1_P363_F
CSF2_E248_R	CYP2E1_P416_F	HOXA5_E187_F	ITK_P114_F	ASB4_E89_F	SPI1_P929_F	AFF3_P122_F	ASB4_P391_F	CREBBP_P712_R	LTB4R_P163_F	HSPA2_P162_R	PI3_E107_F	MMP19_E274_R
CSF3_E242_R	LIMK1_P709_R	SRC_E100_R	CPA4_P1265_R	HSPA2_P162_R	MMP19_E274_R	LCK_E28_F	RUNX3_P393_R	CTAG1B_P77_F	TM7SF3_P1068_R	KRT13_P341_R	AIM2_P624_F	ABCC2_P88_F
AFF3_P122_F	TRPM5_E87_F	DES_P1006_R	LTB4R_P163_F	TIE1_E66_R	CTGF_P693_R	ZIM3_P718_R	LMO2_P794_R	PI3_E107_F	CTGF_P693_R	EGF_E339_F	ZIM3_P451_R	LTB4R_E64_R
CDH17_E31_F	FER_P581_F	FGFR4_P610_F	IL10_P348_F	MAPK10_E26_F	TRPM5_P979_F	PLG_P370_F	PI3_E107_F	APOA1_P261_F	CYP2E1_E53_R	PIK3R1_P307_F	PLG_P370_F	NDN_P1110_F
DSG1_E292_F	SRC_E100_R	GLI2_P295_F	NOS2A_E117_R	SPI1_P929_F	HOXB2_P488_R	TNFSF8_E258_R	GLI2_P295_F	CDH17_P376_F	SERPINB5_P19_R	LTA_P214_R	HTR2A_E10_R	MMP3_P16_R
TRIM29_P135_F	FASTK_P598_R	TRPM5_E87_F	ERCC3_P1210_R	LTB4R_E64_R	DES_P1006_R	C4B_P191_F	SEPT9_P58_R	SFN_E118_F	SFN_E118_F	ZIM3_P718_R	MUSK_P308_F	CSF3R_P472_F
MPO_E302_R	MMP19_E274_R	MSSK1_seq_27_S45_F	LMO2_E148_F	CTGF_P693_R	DNMT2_P199_F	ZIM3_P451_R	ASB4_E89_F	LCK_E28_F	LCK_E28_F	DSG1_E292_F	TMPRSS4_E83_F	DSG1_E292_F
NOS2A_E117_R	IL1RN_E42_F	ZIM3_P718_R	BTK_E64_R	PIK3R1_P307_F	FGF1_E5_F	EGF_P413_F	LIMK1_P709_R	ITK_P114_F	NID1_P714_R	EVI2A_E420_F	LTA_P214_R	S100A4_P194_R
TNFSF8_E258_R	RIPK1_P744_R	CDH17_P376_F	TRIM29_P261_F	ITK_P114_F	AIM2_E208_F	TIE1_E66_R	TRIM29_P135_F	TMPRSS4_P552_F	CSF3_E242_R	DNAJC15_P65_F	LTB4R_P163_F	CD34_P339_R
FGFR4_P610_F	ASB4_E89_F	CREBBP_P712_R	CDH17_P376_F	MPO_E302_R	DSG1_E292_F	CD34_P339_R	TRPM5_P979_F	THPO_E483_F	CPA4_P1265_R	TMPRSS4_E83_F	SPI1_P48_F	AIM2_P624_F
EVI2A_E420_F	ZIM3_P718_R	KRT13_P341_R	SRC_E100_R	GSTM1_P363_F	ITK_P114_F	NID1_P714_R	ZIM3_P718_R	FGFR4_P610_F	ASB4_E89_F	NID1_P677_F	EPHX1_P22_F	CSF3_E242_R
FER_P581_F	XRCC1_P681_R	FGF1_E5_F	ZIM3_P718_R	PADI4_E24_F	HTR2A_E10_R	EVI2A_P94_R	TNFRSF1A_P678_F	CLDN4_P1120_R	MPL_P62_F	SPI1_P48_F	SRC_P164_F	DNAJC15_P65_F
PI3_E107_F	TRIM29_P135_F	PSCA_P135_F	AIM2_E208_F	ACVR1_P983_F	WEE1_P924_R	SPI1_P929_F	IPF1_P750_F	APBA2_P305_R	CSF1R_E26_F	APBA2_P305_R	DMP1_P134_F	EVI2A_E420_F
CDH17_P376_F	ASB4_P391_F	ACVR1_P983_F	IL1RN_E42_F	CD34_P339_R	CYP2E1_E53_R	MUSK_P308_F	TIE1_E66_R	GLI2_E90_F	AFF3_P122_F	EVI2A_P94_R	MPL_P62_F	LTA_P214_R
BTK_E64_R	CDH17_P376_F	RIPK1_P744_R	KRT13_P341_R	LTB4R_P163_F	LCK_E28_F	OSM_P188_F	LTB4R_P163_F	NDN_P1110_F	CSF2_P605_F	PLG_P370_F	HDAC7A_P344_F	SLC5A5_E60_F
KRT13_P341_R	HOXA5_E187_F	MMP19_E274_R	TRPM5_P979_F	EGF_P413_F	PADI4_E24_F	HOXB2_P488_R	BTK_E64_R	RIPK1_P868_F	CHI3L2_E10_F	WEE1_P924_R	APOA1_P261_F	AGXT_P180_F
HLA-DPA1_E35_R	NDN_P1110_F	PLG_P370_F	PADI4_E24_F	ERCC3_P1210_R	PI3_P274_R	CCKAR_P270_F	LCK_E28_F	MAGEC3_E307_F	CSF3R_P472_F	C4B_P191_F	OSM_P188_F	IL10_P85_F
LCN2_P141_R	FGFR4_P610_F	AIM2_E208_F	GLI2_E90_F	NOS2A_E117_R	SLC14A1_P369_R	DMP1_P134_F	CTGF_P693_R	GLI2_P295_F	TMPRSS4_P552_F	PADI4_E24_F	IFNG_P459_R	SEPT9_P58_R
SRC_P164_F	FGF6_E294_F	PI3_P274_R	APBA2_P305_R	EPHX1_P1358_R	LIMK1_P709_R	EPHX1_P22_F	FGFR4_P610_F	EGF_P413_F	GLI2_E90_F	MUSK_P308_F	EVI2A_P94_R	PECAM1_E32_R
LTA_P214_R	HDAC7A_P344_F	ACTG2_P346_F	LMO2_P794_R	DLC1_E276_F	TM7SF3_P1068_R	NOS2A_E117_R	MPO_E302_R	SRC_P164_F	HTR2A_E10_R	SLC22A3_P634_F	PIK3R1_P307_F	ACTG2_P346_F
CSF2_P605_F	TFF1_P180_R	WEE1_P924_R	MMP19_E274_R	MMP19_E274_R	GSTM1_P363_F	MPL_P62_F	PTHLH_P757_F	NOS2A_E117_R	THPO_E483_F	APOC1_P406_R	FGF7_P44_F	NID1_P677_F
TMPRSS4_P552_F	PSCA_P135_F	CSF2_P605_F	S100A4_P194_R	MAGEC3_E307_F	P2RX7_P597_F	GSTM1_P363_F	HPN_P823_F	CSF2_P605_F	WRN_P969_F	TIE1_E66_R	SPI1_P929_F	SOD3_P460_R
FGF6_E294_F	MAPK10_E26_F	DNMT2_P199_F	CSF2_P605_F	APOA1_P261_F	MPL_P62_F	ASB4_P52_R	SRC_P164_F	P2RX7_P597_F	HOXB2_P488_R	THPO_E483_F	NOS2A_E117_R	IL1B_P582_R
CSF1R_E26_F	MMP3_P16_R	TRIM29_P135_F	MAGEC3_E307_F	PECAM1_E32_R	TIE1_E66_R	AIM2_P624_F	HLA-DPA1_E35_R	PTHLH_P757_F	PLG_P370_F	CD34_P339_R	TIE1_E66_R	HLA-DPA1_E35_R
RUNX3_P247_F	DES_P1006_R	TFF1_P180_R	TFF1_P180_R	ACVR1_E328_R	TGFB3_E58_R	SLC22A3_P634_F	DNAJC15_P65_F	HLA-DOB_E432_R	CREBBP_P712_R	AIM2_P624_F	ACTG2_P346_F	WEE1_P924_R
DSG1_P159_R	MSH2_P1008_F	LCN2_P141_R	PRSS8_E134_R	IL1B_P582_R	LTA_P214_R	CSF3R_P472_F	CSF3R_P472_F	IFNG_P459_R	FGF1_P357_R	PI3_P274_R	P2RX7_P597_F	PIK3R1_P307_F
APBA2_P305_R	AIM2_E208_F	HOXA5_P479_F	GLI2_P295_F	CCKAR_P270_F	TNFRSF1A_P678_F	MAGEC3_E307_F	TRIP6_P1090_F	CCKAR_P270_F	MMP3_P16_R	APOA1_P261_F	NDN_P1110_F	AATK_E63_R
SRC_E100_R	DDR2_P743_R	AATK_E63_R	CHI3L2_P226_F	IFNG_P459_R	CSF3R_P472_F	PECAM1_E32_R	HLA-DOB_E432_R	MPL_P62_F	XPC_P226_R	FGFR4_P610_F	EGF_E339_F	SLC14A1_P369_R
APBA2_P227_F	IL1RN_P93_R	MCF2_E195_F	CYP2E1_P416_F	DLC1_P695_F	APOA1_P261_F	PADI4_E24_F	SLC14A1_E295_F	TRPM5_P979_F	HPN_P823_F	DMP1_P134_F	CD2_P68_F	MPO_E302_R
MSH2_P1008_F	ACTG2_P346_F	DSG1_E292_F	MPL_P62_F	SOD3_P460_R	OSM_P188_F	PI3_P274_R	AFF3_P122_F	IL10_P85_F	CHI3L2_P226_F	MMP19_E274_R	EGF_P413_F	MAGEC3_E307_F
OSM_P188_F	CCKAR_E79_F	CCKAR_E79_F	TNFRSF1A_P678_F	TIMP1_P615_R	MSH2_P1008_F	MMP19_E274_R	SPI1_P48_F	C4B_P191_F	DMP1_P134_F	MMP3_P55_F	APOC1_P406_R	TIMP1_P615_R
DES_P1006_R	FGF1_E5_F	CYP2E1_E53_R	KRT1_P798_R	CD2_P68_F	CHI3L2_E10_F	IL10_P85_F	DSG1_E292_F	TIE1_E66_R	APOA1_P261_F	AGXT_P180_F	KRT13_P676_F	NPR2_P1093_F
DNAJC15_P65_F	FGF1_P357_R	FASTK_P598_R	HLA-DOB_E432_R	KRT13_P676_F	EVI2A_P94_R	NID1_P677_F	LY6G6E_P45_R	PECAM1_E32_R	RUNX3_P393_R	HOXB2_P488_R	PADI4_E24_F	DNMT2_P199_F
AGXT_P180_F	CSF2_P605_F	NAT2_P11_F	PTPN6_P282_R	RIPK1_P744_R	TNFSF8_E258_R	KRT1_P798_R	RUNX3_P247_F	ZIM3_P718_R	PIK3R1_P307_F	CSF3_E242_R	ITK_P114_F	
EPHX1_P1358_R	NOS2A_E117_R	AGXT_P180_F	SPI1_P929_F	MPL_P62_F	DSG1_P159_R	APBA2_P305_R	DSG1_P159_R	DSG1_E292_F	DNMT2_P199_F	BMPR1A_E88_F	UGT1A1_P315_R	
LMO2_P794_R	PLG_P370_F	APBA2_P227_F	S100A4_E315_F	PLAGL1_E68_R	CREBBP_P712_R	HSPA2_P162_R	OSM_P188_F	APBA2_P227_F	ASB4_P52_R	KRT1_P798_R	PTHLH_P15_R	
MMP19_E274_R	FGF7_P44_F	NOS2A_E117_R	WEE1_P924_R	MUSK_P308_F	MMP3_P55_F	APOA1_P261_F	NPR2_P1093_F	DSG1_P159_R	MAPK10_E26_F	AATK_E63_R	LIMK1_P709_R	
C4B_P191_F	TFF2_P178_F	EPHX1_P22_F	PLG_P370_F	SERPINA5_E69_F		FER_P581_F	LTA_P214_R	HIC-1_seq_48_S103_R	TIMP1_P615_R	LTB4R_E64_R	ASB4_E89_F	

Supplementary Table 4 (cont.)

Bladder (n: 116)	Blood (n: 155)	Bone marrow (n: 136)	Brain (n: 221)	Buccal epithelium (n: 119)	Colon (n: 80)	Esophagus (n: 106)	Liver (n: 109)	Muscle (n: 183)	Pancreas (n: 144)	Prostate (n: 175)	Skin (n: 195)	Stomach (n: 76)
AIM2_E208_F	CSF2_E248_R	DNAJC15_P65_F	CLDN4_P1120_R	PI3_E107_F		APOC1_P406_R	ACTG2_P346_F	EMR3_P39_R	TRPM5_P979_F	MPL_P62_F	HOXB2_P488_R	
NOS3_P38_F	S100A2_P1186_F	IL1RN_E42_F	MUSK_P308_F	BLK_P14_F		DNAJC15_P65_F	CSF3R_P8_F	NBL1_P24_F	RUNX3_P247_F	PECAM1_E32_R	IL2_P607_R	
IL1RN_E42_F	SEPT9_P58_R	DDR2_P743_R	ASB4_P52_R	PTHLH_P757_F		DES_P1006_R	MSH2_P1008_F	MEST_P4_F	KRT13_P341_R	GLI2_P295_F	IL1B_P582_R	
CYP2E1_E53_R	NAT2_P11_F	MSH2_P1008_F	ASB4_E89_F	KRT1_P798_R		CD2_P68_F	MPL_P62_F	AATK_P519_R	SOD3_P460_R	CCKAR_E79_F	MMP9_P189_F	
MSSK1_seq_27_S45_F	MCF2_E195_F	SPI1_P929_F	PTPRH_E173_F	IL10_P85_F		ASB4_E89_F	DES_P1006_R	NOS3_P38_F	BTK_E64_R	EMR3_P39_R	EPHX1_P1358_R	
EGF_E339_F	UGT1A1_P315_R	FGF7_P44_F	PLA2G2A_P528_F	MMP2_P303_R		CD86_P3_F	CCL3_E53_R	IFNG_P188_F	KRT13_P676_F	CD86_P3_F	ASB4_P52_R	
EMR3_P39_R	SPI1_P929_F	AATK_P709_R	CEACAM1_P44_R	PDGFB_P719_F		LTB4R_E64_R	EVI2A_P94_R	CHI3L2_P226_F	PADI4_E24_F	KRT13_P676_F	CD34_P339_R	
ZIM3_P718_R	AATK_P709_R	RIPK1_P868_F	SLC22A3_P634_F	NAT2_P11_F		BLK_P14_F	SPI1_P929_F	CD34_P339_R	ITK_P114_F	CCKAR_P270_F	TRPM5_P979_F	
CREBBP_P712_R	DNMT2_P199_F	TFF2_P178_F	TFF2_P178_F	DMP1_P134_F		LAT_E46_F	S100A4_P194_R	PTHLH_E251_F	DSG1_P159_R	SOD3_P460_R	CCKAR_P270_F	
MPL_P62_F	CREBBP_P712_R	FGF1_P357_R	DES_P1006_R	APBA2_P305_R		SRC_E100_R	MSSK1_seq_27_S45_F	TM7SF3_P1068_R	RIPK1_P744_R	FER_P581_F	GUCY2F_P255_F	
UGT1A1_P315_R	NBL1_E205_R	MMP3_P16_R	VAMP8_P241_F	PLA2G2A_E268_F		MMP9_P189_F	CD34_P339_R	IL1RN_E42_F	CDH17_E31_F	EPHX1_P1358_R	PLA2G2A_E268_F	
MUSK_P308_F	MMP3_P55_F	HLA-DOB_E432_R	S100A2_P1186_F	TFF2_P178_F		GUCY2F_P255_F	DNMT2_P199_F	TDG_E129_F	LIMK1_P709_R	MST1R_E42_R	RIPK1_P868_F	
EVI2A_P94_R	HOXA5_P479_F	PRSS1_E45_R	NDN_P1110_F	AIM2_P624_F		ITK_P114_F	DMP1_P134_F	PIK3R1_P307_F	IL2_P607_R	MAPK4_E273_R	SOD3_P460_R	
APOA1_P261_F	CSF1R_P73_F	ASB4_P391_F	SPI1_P48_F	S100A4_P194_R		MMP3_P55_F	S100A2_P1186_F	PTPRH_E173_F	PTHLH_P757_F	EGF_P413_F	KRT1_P798_R	
ACVR1_P983_F	CCKAR_P270_F	MMP3_P55_F	ACTG2_P346_F	LAT_E46_F		KRT13_P676_F	AIM2_P624_F	PSCA_P135_F	EGF_E339_F	HTR2A_E10_R	PECAM1_E32_R	
HOXB2_P488_R	MAGEC3_E307_F	GUCY2F_P255_F	DSG1_E292_F	DDR2_P743_R		SLC6A8_P409_F	SLC14A1_E295_F	SLC6A8_P193_R	HLA-DOB_E432_R	ACVR1_P983_F		
AIM2_P624_F	DNAJC15_P65_F	EPHX1_P1358_R	IL1B_P582_R	NOTCH4_P938_F		TIMP1_P615_R	PLG_P370_F	IFNG_P188_F	PLA2G2A_P528_F	DSG1_E292_F		
PTHLH_P757_F	MUSK_P308_F	CCKAR_P270_F	APBA2_P227_F	UGT1A1_P315_R		WEE1_P924_R	KRT13_P676_F	EVI2A_P94_R	ITK_P114_F	LTB4R_E64_R		
TNFRSF1A_P678_F	RIPK1_P868_F	CLDN4_P1120_R	PLA2G2A_E268_F	IFNG_E293_F		FGF7_P44_F	CARD15_P665_F	S100A4_P194_R	FGF7_P44_F	TDG_E129_F		
WEE1_P924_R	PRSS1_E45_R	HDAC7A_P344_F	XRCC1_P681_R	TDG_E129_F		SOD3_P460_R	AIM2_E208_F	IL1B_P582_R	CREBBP_P712_R	IL10_P85_F		
CHI3L2_P226_F	NOS3_P38_F	NPR2_P1093_F	IFNG_P459_R	CYP2E1_E53_R		SLC14A1_E295_F	BMPR1A_E88_F	PTPRH_P255_F	DSG1_P159_R	IFNG_P188_F		
EPHX1_P22_F	IL1B_P582_R	MUSK_P308_F	CCL3_E53_R	DNMT2_P199_F		SRC_P164_F	MEST_P62_R	MPO_E302_R	CYP2E1_P416_F	ZIM3_P718_R		
CCKAR_E79_F	NBL1_P24_F	HLA-DOA_P594_F	CD34_P339_R	NDN_P1110_F		MMP3_P16_R	TGFB3_E58_R	CD2_P68_F	PTPRH_E173_F	PLA2G2A_P528_F		
TM7SF3_P1068_R	CYP2E1_E53_R	NBL1_E205_R	CSF3R_P472_F	SRC_E100_R		CTGF_P693_R	MMP3_P55_F	FGF1_E5_F	DNMT2_P199_F	PLAGL1_E68_R		
LTB4R_E64_R	IL2_P607_R	PI3_E107_F	IL10_P85_F	APOC1_P406_R		TFF2_P178_F	SEPT9_P374_F	AIM2_P624_F	IFNG_P459_R	AIM2_E208_F		
HLA-DOB_E432_R	NPR2_P1093_F	PIK3R1_P307_F	C4B_P191_F	NID1_P714_R			IL10_P85_F	IL1RN_E42_F	CTGF_P693_R	RIPK1_P744_R		
SLC14A1_E295_F	APBA2_P227_F	TIMP1_P615_R	DLC1_P695_F	CSF3R_P472_F			ACVR1_P983_F	TIE1_E66_R	IFNG_P188_F	NOS3_P38_F		
ASB4_E89_F	GUCY2F_P255_F	UGT1A1_P315_R	LTB4R_E64_R	TNFSF8_P184_F			SLC22A3_P634_F	LTA_P214_R	TRPM5_P979_F	DES_P1006_R		
PRSS8_E134_R	CLDN4_P1120_R	CSF2_E248_R	DSG1_P159_R	TEK_P526_F				BLK_P14_F	CSF3R_P472_F	FGFR4_P610_F		
SOD3_P460_R	FRK_P36_F	APBA2_P305_R	MMP19_P306_F	DLC1_P88_R				TMPRSS4_E83_F	IL10_P85_F	CSF3R_P472_F		
KRT1_P798_R	IL12B_P1453_F	MAGEC3_E307_F	IFNG_P188_F	RIPK1_P868_F				MSSK1_seq_27_S45_F	HOXA5_P479_F	BLK_P14_F		
ITK_P114_F	TIMP1_P615_R	S100A2_P1186_F	HSPA2_P162_R	ZAP70_P220_R				MMP19_E274_R	HIC-1_seq_48_S103_R	TFF2_P178_F		
SPI1_P929_F	PIK3R1_P307_F	FRK_P36_F	SPP1_P647_F	SPI1_P48_F				HLA-DOB_E432_R	PLAGL1_E68_R	MMP3_P55_F		
TIMP1_P615_R	IFNG_P188_F	SERPINA5_E69_F	ASB4_P391_F	IFNG_P188_F				PECAM1_E32_R	NOS2A_E117_R	PSCA_P135_F		
IL1B_P582_R	MMP19_P306_F	IL2_P607_R	KRT13_P676_F	LIMK1_P709_R				IFNG_P459_R	SERPINA5_E69_F	SFN_E118_F		
	APBA2_P305_R	NOS3_P38_F	CD2_P68_F	MSH3_P13_R				TDG_E129_F	SPP1_P647_F	PRSS1_E45_R		
	DSG1_E292_F	SEPT9_P58_R	SERPINA5_E69_F	ERN1_P809_R				SLC22A18_P216_R	PLA2G2A_E268_F	BMPR1A_E88_F		
	EPHX1_P1358_R	LIG3_P622_R	MST1R_E42_R	GRPR_P200_R				TRPM5_E87_F	CD2_P68_F	GLI2_E90_F		
	DMP1_P134_F	SLC14A1_P369_R	EMR3_P39_R					TRIM29_P135_F	BLK_P14_F	LCN2_P141_R		
	HOXB2_P488_R	IL12B_P1453_F	CSF3R_P8_F					MMP3_P55_F	SNURF_P78_F	MMP19_E274_R		
	DSG1_P159_R	NBL1_P24_F	ZAP70_P220_R					IL10_P85_F	AIM2_E208_F	PTHLH_E251_F		
	HLA-DQA2_E93_F	KLK11_P103_R	PECAM1_E32_R					NOS2A_E117_R	TNFSF8_P184_F	IL1B_P829_F		
	HLA-DOA_P594_F	C4B_E171_F	GFI1_P208_R					FGFR4_P610_F	S100A4_P194_R	CLDN4_P1120_R		
	ACVR1_E328_R	KRT1_P798_R	NOS3_P38_F					OSM_P188_F	CYP2E1_E53_R	IFNG_E293_F		
	SNCG_E119_F	IL1B_P582_R	EGF_P413_F					MAPK4_E273_R	MSH3_P13_R	KRT13_P341_R		
	HLA-DOB_E432_R	SNCG_E119_F	PTHLH_P15_R					MUSK_P308_F	TDG_E129_F	NID1_P714_R		
	TDG_E129_F	LCN2_P86_R	LCN2_P86_R					SLC14A1_E295_F	CHI3L2_P226_F	CCKAR_P270_F		
	EGF_P413_F	DSG1_P159_R	HPN_P823_F					CD86_P3_F	EMR3_E61_F	GUCY2F_P255_F		
	C4B_E171_F	CSF1R_E26_F	PTK6_E50_F					KRT5_P308_F	TFF2_P178_F	HPN_P823_F		
	NOS2A_P288_R	ITK_P114_F	IL2_P607_R					CCKAR_P270_F	IL12B_P1453_F	TIMP1_P615_R		
	AGXT_P180_F	CSF1R_P73_F	GUCY2F_P255_F					S100A2_P1186_F	HLA-DQA2_E93_F	IL1B_P829_F		
	IFNG_P459_R	SNCG_P53_F	TIMP1_P615_R					TRIP6_P1090_F	GFI1_P208_R	PECAM1_P135_F		
	GRPR_P200_R	ERCC3_P1210_R	MMP9_P189_F					ASB4_P391_F	SPI1_P929_F	MMP19_P306_F		
	ITK_P114_F	INS_P248_F	RIPK3_P124_F					EPHB1_E202_R	CARD15_P665_F	CDH17_P376_F		
	GFAP_P56_R	NOS2A_P288_R	EPHX1_P22_F					MCF2_E195_F	GUCY2F_P255_F	HOXA5_E187_F		
	PI3_P274_R		PRSS1_E45_R					MMP19_P306_F	HPN_P823_F	GSTM1_P363_F		
	KRT1_P798_R		SLC14A1_E295_F					LTB4R_E64_R	TIMP1_P615_R	DES_P1006_R		
	TMPRSS4_P552_F		IFNG_E293_F					GPATC3_P410_R	IL1B_P829_F	SYK_P584_F		
	KRT5_P308_F		RARA_P1076_R					THBS2_P605_R	PECAM1_P135_F	PTHLH_P757_F		
	DDR1_P332_R		DLC1_E276_F					PDGFRA_E125_F	MMP19_P306_F	DDR2_P743_R		
	LCN2_P141_R		MMP3_P55_F					SLC22A3_P634_F	CDH17_P376_F	SRC_P164_F		
	KLK11_P103_R		CARD15_P302_R					AATK_P709_R	HOXA5_E187_F	OSM_P34_F		
	RUNX3_P393_R		MSH2_P1008_F					LY6G6E_P45_R	GSTM1_P363_F	NOS3_P38_F		
	BLK_P14_F		CREBBP_P712_R					EPHX1_P22_F	DES_P1006_R	PGR_P790_F		
	APOC1_P406_R		PTHLH_P757_F					DNMT2_P199_F	SYK_P584_F	HLA-DOA_P594_F		
	LIG3_P622_R		RIPK1_P868_F					SOD3_P460_R	PTHLH_P757_F	EPHX1_P22_F		
	SERPINA5_E69_F		TIE1_E66_R					CD9_P585_R	DDR2_P743_R	B3GALT5_E246_R		
	MSH3_P13_R		EMR3_E61_F					RIPK1_P744_R	ZAP70_P220_R	NOTCH4_P938_F		
	EPHX1_E152_F		MMP3_P16_R					NBL1_E205_R	SRC_P164_F	INS_P248_F		
	TEK_P526_F		CHI3L2_E10_F					CD86_P3_F	TNFSF8_P184_F	HOXB2_P99_F		
	MST1R_P87_R		PGR_P790_F					SNURF_P78_F	PECAM1_P135_F	ZAP70_P220_R		
	TNFRSF1A_P678_F		PSCA_E359_F					MMP3_P55_F	DLC1_P695_F	SRC_E100_R		
	LCK_E28_F		PLAGL1_E68_R					ZAP70_P220_R	SYK_P584_F	MT1A_P600_F		
	PLAT_E158_F		CD86_P3_F					HOXB2_P488_R	MT1A_P600_F	EMR3_E61_F		
			MST1R_P87_R					DLC1_P695_F	CYP2E1_P416_F	LIMK1_P709_R		
			IL1B_P829_F					MST1R_E42_R	DLC1_P88_R	CCL3_E53_R		
			CARD15_P665_F					KRT1_P798_R	SERPINB5_P19_R	ASB4_E89_F		
			S100A2_E36_R					MMP19_E274_R	SPP1_P647_F	WEE1_P924_R		
			LAT_E46_F					HOXA5_P479_F	GPATC3_P410_R			
			VAV1_E9_F					MMP19_P306_F	TRIM29_P135_F			
			PECAM1_P135_F					GUCY2F_P255_F	SERPINA5_E69_F			
			AATK_E63_R					IL2_P607_R	EMR3_E61_F			
			CTGF_P693_R					S100A4_P194_R	CHI3L2_P226_F			
								VAMP8_P241_F	XRCC1_P681_R			
									WEE1_P924_R			

Supplementary Table 4 (cont.)

Bladder (n: 116)	Blood (n: 155)	Bone marrow (n: 136)	Brain (n: 221)	Buccal epithelium (n: 119)	Colon (n: 80)	Esophagus (n: 106)	Liver (n: 109)	Muscle (n: 183)	Pancreas (n: 144)	Prostate (n: 175)	Skin (n: 195)	Stomach (n: 76)
			NOS2A_P288_R					PLA2G2A_P528_F		TEK_P526_F	DDR2_P743_R	
			HLA-DQA2_E93_F					GP1BB_E23_F		MSSK1_seq_27_S45_F	FER_P581_F	
			DLC1_P88_R					IL12B_P1453_F		LAT_E46_F	HLA-DQA2_E93_F	
			OSM_P34_F					STAT5A_P704_R		WNT10B_P823_R	CREBBP_P712_R	
			MAP3K8_P1036_F					SPI1_E205_F		AATK_P519_R	GSTM1_P363_F	
			THBS2_P605_R					MSH3_P13_R		LCN2_P141_R	HOXA5_P479_F	
			HLA-DPA1_P28_R					CD34_P780_R		IFNG_E293_F	NID1_P677_F	
			DMP1_P134_F					TBX1_P885_R		PDGFRA_E125_F	PTPRH_E173_F	
			B3GALT5_E246_R					CCL3_E53_R		ACTG2_P346_F	TNFRSF1A_P678_F	
			EPHX1_P1358_R					CASP8_E474_F		SERPINB5_P19_R	SLC5A5_E60_F	
			STAT5A_P704_R					ARHGDIB_P148_R		GPATC3_P410_R	LAT_E46_F	
			NAT2_P11_F					CCKAR_E79_F			SLC6A8_P409_F	
			APOC1_P406_R					KRAS_E82_F			DNAJC15_P65_F	
			VAMP8_P114_F					GFI1_P208_R			CCKAR_E79_F	
			CYP2E1_E53_R					MAP3K8_P1036_F			NOTCH4_P938_F	
			PYCARD_P150_F					PRSS1_E45_R			GLI2_P295_F	
			MAPK4_E273_R					CYP2E1_E53_R			PI3_P1394_R	
			MSSK1_seq_27_S45_F					LCN2_P141_R			NAT2_P11_F	
			SYK_P584_F					DDR2_P743_R			PEG3_E496_F	
			SPDEF_P6_R								TFF1_P180_R	
			CASP8_E474_F								PGR_P790_F	
			KLK11_P103_R								IL12B_P1453_F	
			TNFSF8_P184_F								SNRPN_seq_12_S127_F	
			JAK3_P1075_R								OSM_P34_F	
			FGF7_P44_F								HLA-DOB_E432_R	
			VAMP8_E7_F								SPI1_E205_F	
			IL12B_P1453_F								MSH3_P13_R	
			HLA-DPA1_P205_R								NOS2A_P288_R	
			BMPR1A_E88_F								MFAP4_P197_F	
			SNURF_P78_F								ASB4_P391_F	
			TM7SF3_P1068_R								KRT5_E196_R	
			SLC22A18_P216_R									
			INS_P248_F									
			PTHR1_P258_F									
			CD34_P780_R									
			MST1R_P392_F									
			MOS_P746_F									
			NOTCH4_E4_F									
			VAV1_P317_F									
			NOTCH4_P938_F									
			CAPG_E228_F									
			HLA-DOA_P594_F									
			EVI2A_E420_F									
			AATK_P709_R									
			P2RX7_P597_F									
			PADI4_P1011_R									
			PTHLH_E251_F									
			SPI1_E205_F									
			AATK_P519_R									
			SEPT9_P58_R									
			KRT5_P308_F									
			ACVR1_P983_F									
			CCKAR_P270_F									
			NBL1_P24_F									
			PEG3_E496_F									
			GSTM1_P363_F									
			MSH3_P13_R									

Supplementary Table 5. List of CpG sites with significant age-dependent methylation in blood. CpG island associated (CGI): Yes (Y) or not (N).

CpG site (n= 48)	CGI	Gene Symbol	+ Correlation	p-Value
ESR1_P151_R	Y	ESR1	0.62	4.30E-15
PENK_E26_F	Y	PENK	0.61	3.53E-14
BMP4_P199_R	Y	BMP4	0.61	4.39E-14
IL17RB_E164_R	Y	IL17RB	0.60	9.11E-14
NRG1_E74_F	Y	NRG1	0.60	1.64E-13
MFAP4_P10_R	N	MFAP4	0.59	5.40E-13
FZD9_E458_F	Y	FZD9	0.59	5.86E-13
PALM2-AKAP2_P420_R	Y	PALM2-AKAP2	0.59	7.62E-13
FGF2_P229_F	Y	FGF2	0.59	1.03E-12
NEFL_P209_R	Y	NEFL	0.59	1.11E-12
DBC1_P351_R	Y	DBC1	0.58	1.46E-12
MYOD1_E156_F	Y	MYOD1	0.58	2.17E-12
TUSC3_E29_R	Y	TUSC3	0.58	4.05E-12
IPF1_P234_F	Y	IPF1	0.57	6.18E-12
COL1A2_P48_R	Y	COL1A2	0.57	6.48E-12
PITX2_E24_R	Y	PITX2	0.57	8.77E-12
DBC1_E204_F	Y	DBC1	0.57	9.85E-12
SLIT2_P208_F	Y	SLIT2	0.56	1.88E-11
EYA4_P794_F	Y	EYA4	0.56	2.12E-11
CDH11_P203_R	Y	CDH11	0.56	3.07E-11
CDH13_P88_F	Y	CDH13	0.56	4.62E-11
FAT_P279_R	Y	FAT	0.55	1.19E-10
RAB32_P493_R	Y	RAB32	0.55	2.02E-10
ALOX12_E85_R	Y	ALOX12	0.54	2.37E-10
FRZB_E186_R	Y	FRZB	0.54	2.40E-10
FGF3_P171_R	Y	FGF3	0.54	4.10E-10
TJP1_P326_R	Y	TJP1	0.54	4.85E-10
IGFBP3_P1035_F	Y	IGFBP3	0.54	4.91E-10
DIO3_P674_F	Y	DIO3	0.53	7.34E-10
HS3ST2_E145_R	Y	HS3ST2	0.53	7.99E-10
KDR_P445_R	Y	KDR	0.53	8.69E-10
ASCL2_P609_R	Y	ASCL2	0.53	9.49E-10
HIC-1_seq_48_S103_R	Y	HIC1	0.53	1.04E-09
MT1A_P49_R	Y	MT1A	0.53	2.16E-09
HTR1B_P222_F	Y	HTR1B	0.52	2.49E-09
PALM2-AKAP2_P183_R	Y	PALM2-AKAP2	0.52	2.55E-09
FAT_P973_R	Y	FAT	0.52	3.21E-09
HOXA11_E35_F	Y	HOXA11	0.52	3.82E-09
DES_E228_R	Y	DES	0.52	4.99E-09
PTPRG_P476_F	Y	PTPRG	0.52	5.25E-09
LOX_P71_F	Y	LOX	0.52	6.76E-09
MOS_E60_R	Y	MOS	0.51	9.81E-09
IGFBP3_P423_R	Y	IGFBP3	0.51	1.12E-08
PTGS2_P308_F	Y	PTGS2	0.51	1.37E-08
ZMYND10_P329_F	Y	ZMYND10	0.51	1.46E-08
ISL1_E87_R	Y	ISL1	0.51	1.84E-08
ISL1_P379_F	Y	ISL1	0.50	2.47E-08
MME_E29_F	Y	MME	0.50	3.22E-08

CpG site (n= 30)	CGI	Gene Symbol	- Correlation	p-Value
IL16_P93_R	N	IL16	-0.81	3.61E-34
CARD15_P302_R	N	CARD15	-0.77	9.66E-29
NFKB1_P496_F	Y	NFKB1	-0.76	6.49E-28
HLA-DPA1_E35_R	N	HLA-DPA1	-0.71	2.78E-22
SPP1_P647_F	N	SPP1	-0.71	4.71E-22
AIM2_P624_F	N	AIM2	-0.71	6.52E-22
CD82_P557_R	Y	CD82	-0.68	1.35E-19
PXN_P308_F	Y	PXN	-0.66	3.32E-18
TRIP6_P1274_R	Y	TRIP6	-0.66	1.15E-17
HLA-DPA1_P205_R	N	HLA-DPA1	-0.65	2.50E-17
HLA-DPA1_P28_R	N	HLA-DPA1	-0.64	1.97E-16
ACVR1_E328_R	N	ACVR1	-0.64	2.34E-16
EVI2A_E420_F	N	EVI2A	-0.62	1.00E-14
TJP2_P518_F	Y	TJP2	-0.59	3.80E-13
ERCC1_P440_R	Y	ERCC1	-0.59	5.86E-13
BCR_P422_F	Y	BCR	-0.57	1.12E-11
BCR_P346_F	Y	BCR	-0.56	2.11E-11
CLK1_P538_F	N	CLK1	-0.56	2.33E-11
SOD3_P225_F	N	SOD3	-0.56	3.97E-11
TRIP6_P1090_F	Y	TRIP6	-0.55	1.32E-10
IL8_E118_R	N	IL8	-0.54	2.81E-10
JAK3_P1075_R	N	JAK3	-0.54	3.03E-10
CSF1R_E26_F	N	CSF1R	-0.54	3.40E-10
KLK11_P103_R	N	KLK11	-0.54	4.36E-10
MPL_P62_F	N	MPL	-0.53	1.09E-09
FAS_P322_R	N	FAS	-0.53	1.24E-09
MPL_P657_F	N	MPL	-0.53	2.13E-09
LTB4R_P163_F	N	LTB4R	-0.50	2.37E-08
CTSD_P726_F	Y	CTSD	-0.50	2.83E-08
PADI4_E24_F	N	PADI4	-0.50	3.08E-08

Supplementary Table 6. List of CpG sites unmethylated in differentiated material from adult and embrionyc stem cells and methylated in the corresponding primary tissues. CpG island associated (CGI): Yes (Y) or not (N).

Neuron differentiation (n:52)	CGI
ACVR1_P983_F	N
BMP4_P123_R	Y
BMP4_P199_R	Y
CCR5_P630_R	N
CD9_P585_R	Y
CLDN4_P1120_R	N
CTGF_P693_R	N
DDR1_P332_R	N
EPHA2_P203_F	Y
EYA4_P794_F	Y
FGFR2_P460_R	Y
FGFR3_P1152_R	Y
GFI1_P208_R	Y
GLI3_E148_R	N
GP1BB_E23_F	Y
GP1BB_P278_R	Y
GRB7_P160_R	N
GSTM2_E153_F	Y
GSTM2_P109_R	N
HOXB2_P488_R	N
HOXB2_P99_F	Y
KIAA0125_E29_F	N
LIF_P383_R	N
MMP10_E136_R	N
MMP14_P13_F	Y
MMP2_P303_R	Y
MST1R_P392_F	Y
MT1A_P600_F	Y
MUC1_P191_F	Y
NGFR_P355_F	Y
POMC_P400_R	Y
PRKCDBP_E206_F	Y
PRKCDBP_P352_R	Y
PRSS8_E134_R	Y
PTHLH_E251_F	N
PTHLH_P15_R	N
PTHLH_P757_F	N
PTPN6_E171_R	Y
PTPN6_P282_R	N
RBP1_P426_R	Y
RIPK3_P124_F	N
RIPK3_P24_F	N
SH3BP2_E18_F	N
SHB_P691_R	Y
SPP1_E140_R	N
SPP1_P647_F	N
TDGF1_E53_R	Y
TDGF1_P428_R	N
TGFBI_P173_F	Y
TNFRSF10D_P70_F	Y
VAMP8_E7_F	N
VAMP8_P114_F	N

Muscle differentiation (n:75)	CGI
AATK_P519_R	Y
AATK_P709_R	Y
AGXT_P180_F	N
ATP10A_P147_F	Y
BGN_P333_R	N
CCKAR_E79_F	N
CD1A_P6_F	N
CD86_P3_F	N
CD9_P504_F	Y
CD9_P585_R	Y
CRIP1_P274_F	Y
CSF1R_P73_F	N
CSF3R_P8_F	N
CTGF_P693_R	N
DAB2IP_E18_R	Y
DDR2_E331_F	N
DDR2_P743_R	N
DLC1_P88_R	N
DSG1_P159_R	N
EPHA1_P119_R	Y
EPHB1_E202_R	Y
EVI2A_P94_R	N
FASTK_P598_R	Y
FGF7_P44_F	N
FOSL2_E384_R	Y
GABRA5_P1016_F	N
GABRG3_P75_F	N
GLI3_E148_R	N
GRPR_P200_R	N
GSTM1_P363_F	Y
H19_P541_F	Y
HIC1_P565_R	Y
IFNG_P188_F	N
IFNGR2_P377_R	Y
IGSF4C_E65_F	Y
IL12B_P1453_F	Y
IL16_P93_R	N
KIAA0125_E29_F	N
KRAS_E82_F	Y
LIF_P383_R	N
MMP14_P13_F	Y
MMP19_E274_R	N
MMP3_P55_F	N
MPO_E302_R	N
MST1R_P392_F	Y
NDN_E131_R	Y
NGFR_P355_F	Y
NS2A_E117_R	N
NS2A_P288_R	N
NTCH4_E4_F	N
PADI4_P1011_R	N
PADI4_P1158_R	N
PDGFB_P719_F	N
PDGFRA_E125_F	N
PLA2G2A_E268_F	N
PRKCDBP_P352_R	Y
PROM1_P44_R	N
PRSS1_E45_R	N
PRSS8_E134_R	Y
PTHR1_P258_F	N
PTK7_E317_F	Y
PYCARD_P150_F	Y
RARA_P1076_R	N
RASSF1_P244_F	Y
RIPK1_P868_F	N
S100A2_E36_R	N
SEPT9_P58_R	Y
SFTPB_P689_R	N
SPDEF_E116_R	N
TBX1_P520_F	N
TEK_E75_F	N
TMPRSS4_P552_F	N
TNFRSF10D_P70_F	Y
WNT8B_E487_F	N
ZMYND10_P329_F	Y

Supplementary Table 7. List of CpG sites with cancer specific differential methylation (hypermethylation and hypomethylation) according to tumor type and arranged by increasing values. CpG island associated (CGI): Yes (Y) or not (N). (*: methylation differences calculated by different method due to the low number of samples).

HIPERMETHYLATION

Lymphoid neoplasias (n:200)	CGI	Head and neck cancer (n:171)	CGI	Pancreatic cancer (n:150)	CGI	Endometrium cancer* (n:102)	CGI	Colon cancer (96)	CGI	Prostate cancer (n:76)	CGI	Glioma (n:66)	CGI	Ovarian cancer* (n:40)	CGI	Lung cancer* (n: 39)	CGI	Bladder cancer (n:36)	CGI	Melanoma (n:28)	CGI	Breast cancer* (n:18)	CGI	Myeloid neoplasias (n:15)	CGI	Testis cancer* (n:10)	CGI	Stomach cancer (n:7)	CGI
DBC1_P351_R	Y	LCN2_P141_R	N	CDH13_E102_F	Y	PENK_E26_F	Y	EYA4_E277_F	Y	GSTP1_E322_R	Y	FZD9_E458_F	Y	CFTR_P372_R	Y	HOXA9_E252_R	Y	HOXA9_E252_R	Y	ALOX12_P223_R	Y	CFTR_P372_R	Y	FOSL2_E384_R	Y	BCR_P346_F	Y	GAS7_E148_F	Y
NEFL_P209_R	Y	PI3_P274_R	N	GAS7_E148_F	Y	DLK1_E227_R	Y	TWIST1_E117_R	Y	GSTM2_E153_F	Y	HOXA11_P698_F	Y	HCK_P858_F	Y	MOS_E60_R	Y	HOXA11_P698_F	Y	ALOX12_E85_R	Y	HOXA9_E252_R	Y	PTPN6_P282_R	N	SEPT5_P464_R	Y	TGFB3_E58_R	N
HTR1B_P222_F	Y	KRT13_P341_R	N	TWIST1_E117_R	Y	SOX1_P294_F	Y	SFRP1_P157_F	Y	RARB_P60_F	Y	TES_P182_F	Y	MOS_E60_R	Y	HS3ST2_E145_R	Y	TJP2_P330_R	Y	MET_E333_F	Y	RBP1_P426_R	Y	FZD9_E458_F	Y	GSTM1_P363_F	Y	SFRP1_P157_F	Y
HS3ST2_E145_R	Y	SLC22A18_P216_R	N	CCNA1_P216_F	Y	NEFL_P209_R	Y	SLIT2_E111_R	Y	COL18A1_P494_R	Y	HOXA9_E252_R	Y	HOXA9_E252_R	Y	EYA4_P794_F	Y	TJP2_P518_F	Y	SNCG_E119_F	N	TNFRSF10D_E27_F	Y	HS3ST2_E145_R	Y	IPF1_P750_F	Y	SOX1_P294_F	Y
IGSF4_P86_R	Y	TMPRSS4_E83_F	N	SLIT2_P208_F	Y	HTR1B_P222_F	Y	TMEFF2_E94_R	Y	PDGFRB_P273_F	Y	CD81_P272_R	Y	TAL1_P594_F	Y	TAL1_P594_F	Y	PENK_E26_F	Y	GRB7_E71_R	N	MME_E29_F	Y	DBC1_P351_R	Y	BCR_P422_F	Y	MDR1_seq_42_S300_R	Y
DLK1_E227_R	Y	LCN2_P86_R	N	FLT3_E326_R	Y	NPY_P295_F	Y	SFRP1_E398_R	Y	APC_P14_F	Y	HTR1B_E232_R	Y	DIO3_P674_F	Y	STAT5A_E42_F	N	CYP1B1_E83_R	Y	AATK_P709_R	Y	TSP50_P137_F	Y	HIC-1_seq_48_S103_R	Y	HOXA5_E187_F	Y	HS3ST2_E145_R	Y
SLC22A3_E122_R	Y	VAMP8_P241_F	N	CCNA1_E7_F	Y	CDH13_P88_F	Y	NPY_E31_R	Y	MFAP4_P10_R	N	TNFRSF10A_P171_F	Y	PENK_E26_F	Y	HOXA9_P1141_R	Y	WT1_P853_F	Y	DDR1_P332_R	N	TERT_P360_R	Y	EPHB1_E202_R	Y	TBX1_P520_F	N	CCKAR_P270_F	N
ISL1_P379_F	Y	KRT5_E196_R	Y	NPY_P295_F	Y	CDH13_E102_F	Y	TFPI2_P9_F	Y	SCGB3A1_E55_R	Y	TNFRSF10A_P91_F	Y	SOX1_P294_F	Y	TPEF_seq_44_S88_R	Y	TAL1_P594_F	Y	DHCR24_P652_R	N	APC_P14_F	Y	MOS_E60_R	Y	HIC-1_seq_48_S103_R	Y		
MYOD1_E156_F	Y	TRIP6_P1274_R	Y	GALR1_E52_F	Y	HTR1B_E232_R	Y	NPY_P295_F	Y	ALOX12_P223_R	Y	HOXA9_P1141_R	Y	LEFTY2_P561_F	N	FZD9_E458_F	Y	DLK1_E227_R	Y	SNCG_P53_F	Y	GSTP1_E322_R	Y	EPHB1_E202_R	Y	ARHGDIB_P148_R	N		
DBC1_E204_F	Y	TRIM29_P261_F	N	WT1_E32_F	Y	DCC_P471_R	Y	TFPI2_P152_R	Y	POMC_P400_R	Y	TES_E172_F	Y	CALCA_E174_R	Y	DIO3_P90_F	Y	SLIT2_P208_F	Y	RARA_P176_R	N	RASSF1_E116_F	Y	MYOD1_E156_F	Y	GPATC3_P410_R	N		
IGFBP3_P423_R	Y	DSG1_P159_R	N	RASGRF1_E16_F	Y	ADCYAP1_P455_R	Y	FLT4_P180_R	Y	ALOX12_E85_R	Y	TAL1_P594_F	Y	THY1_P149_R	Y	FRZB_E186_R	Y	HOXA9_P303_F	Y	IL1RN_P93_R	N	SOX1_P294_F	Y	BAX_E281_R	Y				
SOX1_P294_F	Y	PENK_E26_F	Y	SFRP1_E398_R	Y	ADCYAP1_P398_F	Y	HS3ST2_E145_R	Y	GSTM2_P109_R	N	HTR1B_P222_F	Y	HOXA11_P698_F	Y	HCK_P858_F	Y	FLT3_E326_R	Y	TGFB3_E58_R	N	SOX17_P287_R	Y	CFTR_P372_R	Y				
FAT_P279_R	Y	LY6G6E_P45_R	N	TPEF_seq_44_S88_R	Y	TPEF_seq_44_S88_R	Y	SLIT2_P208_F	Y	PDGFRB_E195_R	N	FLT3_E326_R	Y	ALOX12_P223_R	Y	DLK1_E227_R	Y	SOX17_P287_R	Y	TNFRSF10D_E27_F	Y	MOS_E60_R	Y	DIO3_P674_F	Y				
MOS_E60_R	Y	TRIP6_P1090_F	Y	MYOD1_E156_F	Y	NPY_E31_R	Y	DAB2IP_E18_R	Y	TJP2_P330_R	Y	AHR_P166_R	Y	DIO3_P90_F	Y	JAK3_P156_R	N	PENK_P447_R	Y	STAT5A_P704_R	N	CDH13_P88_F	Y	CDH11_P354_R	Y				
SLIT2_P208_F	Y	PSCA_P135_F	N	NTRK3_P636_R	Y	PENK_P447_R	Y	GAS7_E148_F	Y	IGFBP7_P297_F	Y	GATA6_P21_R	Y	GLI3_P453_R	Y	NOTCH4_E4_F	N	NPY_E31_R	Y	COL1A2_P407_R	N	APC_E117_R	Y	IGSF4C_E65_F	Y				
HS3ST2_P171_F	Y	JAK3_P1075_R	N	MDR1_seq_42_S300_R	Y	HS3ST2_E145_R	Y	TMEFF2_P152_R	Y	GSTP1_P74_F	Y	MEST_E150_F	Y	ATP10A_P147_F	Y	ASCL2_P609_R	Y	NPY_P295_F	Y	POMC_P400_R	Y	BMP4_P123_R	Y						
PALM2-AKAP2_P420_R	Y	STAT5A_P704_R	N	DBC1_P351_R	Y	HS3ST2_P171_F	Y	GSTP1_seq_38_S153_R	Y	IRAK3_E130_F	Y	ASCL1_P747_F	Y	HOXA11_P698_F	Y	SOX1_P294_F	Y	IGFBP5_P9_R	Y	IRAK3_P185_F	Y								
CFTR_P372_R	Y	MST1R_E42_R	Y	EYA4_E277_F	Y	CFTR_P372_R	Y	NTSR1_P318_F	Y	RARA_P176_R	N	PENK_E26_F	Y	MFAP4_P10_R	N	SOX17_P287_R	Y	CDH11_P354_R	Y	SNCG_P98_R	Y	IGFBP3_P423_R	Y						
HTR1B_E232_R	Y	HLA-DOB_E432_R	N	FGF8_P473_F	Y	DBC1_E204_F	Y	FLI1_E29_F	Y	RARB_E114_F	Y	MOS_E60_R	Y	HS3ST2_E145_R	Y	PENK_E26_F	Y	TPEF_seq_44_S88_R	Y	BMP4_P123_R	Y								
RAB32_P493_R	Y	EMR3_P39_R	N	HS3ST2_P171_F	Y	ASCL2_P360_F	Y	GSTM2_E153_F	Y	NEU1_P745_F	Y	NEFL_P209_R	Y	ALOX12_E85_R	Y	HS3ST2_P171_F	Y	MYOD1_E156_F	Y	CYP1B1_E83_R	Y								
DIO3_P674_F	Y	NBL1_E205_R	N	SOX1_P294_F	Y	MOS_E60_R	Y	RASGRF1_E16_F	Y	ADAMTS12_E52_R	Y	HOXA11_E35_F	Y	DCC_E53_R	Y	HS3ST2_P171_F	Y	HTR1B_E232_R	Y	KCNK4_E3_F	Y								
NGFB_E353_F	Y	NBL1_P24_F	N	CDH13_P88_F	Y	TERT_P360_R	Y	MME_E29_F	Y	TRIP6_E33_F	Y	NPY_P295_F	Y	HS3ST2_P171_F	Y	GP1BB_P278_R	Y	LEFTY2_P561_F	N	IL17RB_P788_R	Y								
CHGA_E52_F	Y	ZIM3_P718_R	N	NTRK3_P752_F	Y	EPHA5_E158_R	Y	NGFB_E353_F	Y	SERPINE1_E189_R	Y	GATA6_P726_F	Y	FRZB_E186_R	Y	SOX1_P294_F	Y	GSTM1_P266_F	Y	IL6_E168_F	N								
IGF2_E134_R	Y	FGF1_P357_R	N	SEZ6L_P249_F	Y	DBC1_P351_R	Y	EYA4_P794_F	Y	SEPT9_P374_F	Y	TNFRSF10D_E27_F	Y	THY1_P20_R	Y	POMC_P400_R	Y	SLIT2_E111_R	Y	BMP4_P199_R	Y								
SFRP1_P157_F	Y	MAP3K8_P1036_F	Y	NTRK3_E131_F	Y	OPCML_E219_R	Y	FGF5_P238_R	Y	MFAP4_P197_F	N	DSC2_E90_F	Y	TNFRSF10C_P7_F	Y	CFTR_P372_R	Y	HS3ST2_E145_R	Y	S100A2_P1186_F	N								
SFRP1_E398_R	Y	TGFB3_E58_R	N	DLK1_E227_R	Y	DIO3_P674_F	Y	CD40_P372_R	Y	ADAMTS12_P250_R	Y	HOXA5_E187_F	Y	HOXA9_P303_F	Y	FGF2_P229_F	Y	GSTM1_P363_F	Y	FRZB_E186_R	Y								
FGFR2_P460_R	Y	AATK_E63_R	N	HOXA9_P1141_R	Y	DCC_P177_F	Y	WNT2_P217_F	Y	CFTR_P372_R	Y	DIO3_P674_F	Y	ALOX12_E85_R	Y	DDR2_P743_R	N	CDH13_P88_F	Y	TERT_P360_R	Y								
PTGS2_P308_F	Y	SERPINB5_P19_R	Y	SOX17_P303_F	Y	SOX1_P1018_R	Y	IGFBP3_P423_R	Y	KIT_P367_R	Y	ALOX12_E85_R	Y	RASSF1_P244_F	Y	RBP1_P426_R	Y	HS3ST2_P171_F	Y	LCN2_P86_R	N								
SEMA3C_E49_R	Y	MSH2_P1008_F	Y	MYH11_P22_F	Y	THY1_P149_R	Y	NTRK3_P752_F	Y	PDGFRB_P343_F	Y	ISL1_P379_F	Y	DBC1_P351_R	Y	CALCA_E174_R	Y	PITX2_E24_R	Y										
EYA4_P794_F	Y	CREBBP_P72_R	Y	SOX1_P1018_R	Y	RASSF1_E116_F	Y	WT1_E32_F	Y	TERT_P360_R	Y	TFAP2C_E76_F	Y	MFAP4_P197_F	N	CSPG2_P82_R	Y	TERT_E20_F	Y										
GATA6_P726_F	Y	MMP14_P13_F	Y	HIC2_P498_F	Y	ASCL1_P747_F	Y	SCGB3A1_E55_R	Y	GSTM2_P453_R	N	IRAK3_P13_F	Y	ZNF215_P71_R	Y	APC_P14_F	Y	NPR2_P618_F	Y										
CDH13_P88_F	Y	GRB7_P160_R	N	MOS_E60_R	Y	GSTM2_E153_F	Y	HS3ST2_P171_F	Y	CD40_P372_R	Y	MEST_P62_R	Y	EPHA5_P66_F	Y	ZNF215_P71_R	Y	NEFL_P209_R	Y										
CDH13_E102_F	Y	SFN_E118_F	Y	IGFBP3_P423_R	Y	SLC5A8_E60_R	Y	AGTR1_P41_F	Y	HFE_E273_R	Y	IRAK3_P185_F	Y	HCK_P46_R	Y	CHGA_E52_F	Y	ISL1_P554_F	Y										
TFAP2C_E260_F	Y	GLI2_E90_F	N	ERG_E28_F	Y	MYOD1_E156_F	Y	DBC1_E204_F	Y	RASSF1_E116_F	Y	PCTK1_E77_R	Y	MMP2_P303_R	Y	HOXB13_P17_R	Y	TWIST1_P355_R	Y										
TUSC3_E29_R	Y	MST1R_P87_R	Y	HS3ST2_E145_R	Y	ISL1_E87_R	Y	FLT3_E326_R	Y	HHIP_E94_F	Y	GFI1_P45_R	Y	CYP1B1_E83_R	Y	COL1A2_E299_F	Y	HIC-1_seq_48_S103_R	Y										
PITX2_E24_R	Y	TNFRSF1A_P678_F	N	FLT1_P302_F	Y	GUCY2D_E419_R	Y	TBX1_P885_R	Y	TBX1_P885_R	Y	NPY_E31_R	Y	PITX2_E24_R	Y	TJP2_P518_F	Y	SOX1_P1018_R	Y										
MLF1_E243_F	Y	GLI2_P295_F	Y	TBX1_P885_R	Y	HOXA9_E252_R	Y	DLK1_E227_R	Y	NOTCH4_E4_F	N	DIO3_E230_R	Y	ZNF215_P129_R	Y	GAS7_E148_F	Y												
PLS3_E70_F	Y	IL1RN_E42_F	N	TAL1_P594_F	Y	HCK_P858_F	Y	CDH13_P88_F	Y	FGF2_P229_F	Y	DDIT3_P1313_R	Y	TSP50_P137_F	Y	TBX1_P885_R	Y												
WNT2_P217_F	Y	BCR_P422_F	Y	SOX17_P287_R	Y	ZNF215_P129_R	Y	TPEF_seq_44_S88_R	Y	HDAC9_E38_F	N	FLT3_P302_F	Y	SEPT9_P374_F	Y	GSTM2_E153_F	Y												
FRZB_E186_R	Y	CXCL9_E268_R	N	HOXA9_E252_R	Y	PRKCDBP_E206_F	Y	ESR1_E298_R	Y	SPARC_P195_F	N	MEST_P4_F	Y	SEPT5_P441_F	Y														
EYA4_E277_F	Y	FGF1_E5_F	N	ADCYAP1_P398_F	Y	SEPT9_P374_F	Y	NTRK3_E131_F	Y	CD9_P585_R	Y	IPF1_P750_F	Y																
HOXA9_E252_R	Y	FER_P581_F	N	TMEFF2_P152_R	Y	PLS3_E70_F	Y	THY1_P149_R	Y	KIT_P405_F	Y	TUSC3_E29_R	Y																
ISL1_E87_R	Y	SEPT9_P58_R	Y	PENK_P447_R	Y	CD40_P372_R	Y	NPY_P91_F	Y	APC_E117_R	Y	BCR_P346_F	Y																
HOXA9_P1141_R	Y	TRIM29_P135_F	N	MMP2_P303_R	Y	TMEFF2_E94_R	Y	ER_seq_a1_S60_F	Y	RBP1_P426_R	Y	FZD9_P175_F	Y																
FZD9_E458_F	Y	SRC_P164_F	N	BMP3_P56_R	Y	CALCA_E174_R	Y	ALK_E183_R	Y	HDAC9_P137_R	N	HOXA9_P303_F	Y																
ONECUT2_E96_F	Y	WEE1_P924_R	N	COL1A2_E299_F	Y	GSTM1_P266_F	Y	FGF5_E16_F	Y	EYA4_E277_F	Y	IPF1_P234_F	Y																
SOX17_P287_R	Y	ALOX12_E85_R	Y	TFPI2_P9_F	Y	CYP1B1_E83_R	Y	ALK_P28_F	Y	SERPINE1_P519_F	N	DNAJC15_P65_F	Y																
ASCL2_P360_F	Y	KCNK4_E3_F	Y	SOX17_E353_F	Y	SPARC_P195_F	N	TWIST1_E145_R	Y	GADD45A_P737_R	N	PALM2-AKAP2_P420_R	Y																
FAT_P973_R	Y	EGF_E339_F	N	TUSC3_E29_R	Y	SLC22A3_E122_R	Y	ADCYAP1_P398_F	Y	NGFR_P355_F	Y	MDR1_seq_42_S300_R	Y																
KDR_E79_F	Y	S100A2_P1186_F	N	FLT1_P615_R	Y	TMEFF2_P152_R	Y	ESR1_P151_R	Y	COL1A2_E299_F	Y	PRKCDBP_E206_F	Y																
CDH11_P354_R	Y	MOS_E60_R	Y	CHGA_E52_F	Y	ISL1_P379_F	Y	SOX17_P287_R	Y	PTGS2_P524_R	Y	AHR_E103_F	Y																
GABRB3_E42_F	Y	CD9_P585_R	Y	GABRB3_E42_F	Y	DIO3_P90_F	Y	IRAK3_P13_F	Y	APC_P280_R	Y	RASSF1_E116_F	Y																
HOXA11_P698_F	Y	AATK_P519_R	Y	SFRP1_P157_F	Y	NTRK3_P752_F	Y	GABRB3_P92_F	Y	SPARC_E50_R	Y	MYOD1_E156_F	Y																
DCC_P471_R	Y	HOXA5_E187_F	Y	NEFL_P209_R	Y	RASSF1_P244_F	Y	SOX1_P294_F	Y	SLC14A1_P369_R	N	DSP_P36_F	Y																
DSC2_E90_F	Y	EPHA5_P66_F	Y	SEZ6L_P299_F	Y	HOXA11_P698_F	Y	HOXA5_E187_F	Y	SNCG_E119_F	N	ISL1_E87_R	Y																
IMPACT_P234_R	Y	PTPN6_P282_R	N	ASCL2_P360_F	Y	AGTR1_P41_F	Y	HTR1B_E232_R	Y	CDKN1B_P1161_F	N	TAL1_E122_F	Y																
GALR1_E52_F	Y	CLDN4_P1120_R	N	HS3ST2_P546_F	Y	MLF1_E243_F	Y	EPHA5_E158_R	Y	CSPG2_P82_R	Y	ICA1_P72_R	Y																
ADAMTS12_E52_R	Y	SNCG_P98_R	Y	FLT4_P180_R	Y	EYA4_E277_F	Y	CDH13_E102_F	Y	PTCH1_E173_F	Y	IGFBP1_P12_R	Y																
TJP1_P390_F	Y	AATK_P709_R	Y	EPHA5_E158_R	Y	HLA-F_E402_F	Y	MOS_E60_R	Y	PYCARD_P150_F	Y	RARA_P176_R	N																
IGFBP3_E65_R	Y	HOXA9_E252_R	Y	FLT1_E444_F	Y	NTRK3_P636_R	Y	MYOD1_E156_F	Y	CCND2_P887_F	Y	DIO3_P90_F	Y																
SLC5A8_E60_R	Y	DHCR24_P652_R	N	GABRB3_P92_F	Y	FLI1_E29_F	Y	CHFR_P501_F	Y	KLK10_P268_R	N	WRN_P969_F	Y																
TIMP3_seq_7_S38_F	Y	CSF1R_P73_F	N	ESR1_P151_R	Y	BDNF_E19_R	Y	EYA4_P508_F	Y	TMEFF1_P626_R	Y	PENK_P447_R	Y																
PENK_P447_R	Y	KRT5_P308_F	N	CCND2_P898_R	Y	TJP2_P330_R	Y	HIC-1_seq_48_S103_R	Y	TRIM29_P261_F	N	TERT_P360_R	Y																
KDR_P445_R	Y	FRK_P36_F	N	RET_seq_53_S374_F	Y	TSP50_P137_F	Y	CYP1B1_E83_R	Y	PYCARD_E87_F	Y	SOX17_P287_R	Y																
ISL1_P554_F	Y	EPHA2_P203_F	Y	NEFL_E23_R	Y	ISL1_P554_F	Y	KDR_P445_R	Y	PYCARD_P393_F	N	SFRP1_P157_F	Y																
ADCYAP1_P398_F	Y	IL1RN_P93_R	N	COL1A2_P48_R	Y	ABO_P312_F	Y	MYH11_P22_F	Y	CCND2_P898_R	Y	WT1_P853_F	Y																
CDH11_P203_R	Y	IFNGR2_P377_R	Y	STAT5A_E42_F	N	ADAMTS12_E52_R	N	LEFTY2_P561_F	Y	CHI3L2_E10_F	N																		
CDH1_P52_R	Y	RIPK3_P124_F	N	SLC5A8_E60_R	Y	FGF2_P229_F	Y	NTRK3_P636_R	Y	CD9_P504_F	Y																		
ETV1_P515_F	Y	IL12B_P392_R	N	SLIT2_E111_R	Y	MFAP4_P10_R	N	DCC_P471_R	Y	TUSC3_E29_R	Y																		
EGFR_E295_R	Y	KLK11_P103_R	N	FLI1_E29_F	Y	MME_E29_F	Y	TUSC3_E29_R	Y	VIM_P811_R	Y																		
NTRK2_P10_F	Y	HS3ST2_E145_R	Y	WT1_P853_F	Y	MDR1_seq_42_S300_R	Y	KDR_E79_F	Y	CDH13_E102_F	Y																		
CTSL_P81_F	Y	HOXA9_P1141_R	Y	KDR_P445_R	Y	MLH1_P381_F	Y	CSPG2_E38_F	Y	RARA_E128_R	N																		
SOX1_P1018_R	Y	IGF1_E394_F	N	MYH11_P236_R	Y	GSTM2_P109_R	N	PENK_P447_R	Y	IFNGR2_P377_R	Y																		
SCGB3A1_E55_R	Y	SLC14A1_P369_R	N	HOXA11_P698_F	Y	GSTM2_P453_R	N	HCK_P858_F	Y	TEK_E75_F	N																		
RBP1_E158_F	Y	LEFTY2_P561_F	N	THY1_P149_R	Y	NTSR1_P318_F	Y	ADCYAP1_P455_R	Y	SLC14A1_E295_F	N																		
CALCA_E174_R	Y	DOIT3_P1313_R	Y	ADAMTS12_E52_R	Y	JAK3_E64_F	Y	CSPG2_P82_R	Y	SLC5A5_E60_F	Y																		
HOXB13_P17_R	Y	PADI4_P1158_R	N	SCGB3A1_E55_R	Y	NRG1_P558_R	Y	NRG1_P558_R	Y																				
ALOX12_E85_R	Y	HOXA11_P698_F	Y	ESR1_E298_R	Y	TUSC3_E29_R	Y	IGF2AS_E4_F	Y																				
FGFR2_P266_R	Y	HOXB2_P99_F	Y	TMEFF2_E94_R	Y	ZNF215_P71_R	Y	GABRB3_E42_F	Y																				
DAPK1_P10_F	Y	FASTK_P598_R	Y	PROK2_P390_F	Y	APC_P14_F	Y	CCNA1_P216_F	Y																				
RET_seq_54_S260_F	Y	TRIM29_E189_F	Y	KIT_P367_R	Y	GABRB3_E42_F	Y	SOX17_P303_F	Y																				
NGFB_P13_F	Y	LIG3_P622_R	N	HOXA9_P303_F	Y	NTRK3_E131_F	Y	CDH11_P354_R	Y																				
TJP1_P326_R	Y	SNCG_E119_F	N	NPY_E31_R	Y	IRAK3_P185_F	Y	FGF3_P171_R	Y																				
PENK_E26_F	Y	SPDEF_P6_R	N	TFPI2_P152_R	Y	TIMP3_seq_7_S38_F	Y	GSTM2_P109_R	N																				
ERBB4_P541_F	Y	SNCG_P53_F	Y	TFPI2_E141_F	Y	TAL1_P594_F	Y	DBC1_P351_R	Y																				
TAL1_P594_F	Y	CALCA_E174_R	Y	PITX2_E24_R	Y	WT1_P853_F	Y	OPCML_E219_R	Y																				
NTRK2_P395_R	Y	ALOX12_P223_R	Y	DES_E228_R	Y	BMP3_P56_R	Y	WT1_P853_F	Y																				
IPF1_P234_F	Y	OGG1_E400_F	Y	ASCL1_E24_F	Y	MMP2_P303_R	Y	COL1A2_E299_F	Y																				
FGF3_P171_R	Y	HS3ST2_P171_F	Y	GSTM2_E153_F	Y	BMP3_E147_F	Y	TFPI2_E141_F	Y																				
IHH_E186_F	Y	CEACAM1_P44_R	N	NPY_P91_F	Y	IRAK3_P13_F	Y	PDE1B_P263_R	Y																				
ASCL1_P747_F	Y	CALCA_P171_F	Y	FZD9_E458_F	Y	IRAK3_E130_F	Y	IRAK3_E130_F	Y																				
DES_E228_R	Y	DBC1_E204_F	Y	TIMP3_seq_7_S38_F	Y	EPHA3_P106_R	Y	HS3ST2_P546_F	Y																				
DCC_P177_F	Y	DES_P1006_R	N	NGFB_P13_F	Y	CD9_P585_R	Y	MMP2_P303_R	Y																				
SLIT2_E111_R	Y	DDR1_P332_R	N	MMP2_P197_F	Y	FRZB_E186_R	Y	NEFL_P209_R	Y																				
SOX2_P546_F	Y	NPR2_P1093_F	Y	DBC1_E204_F	Y	WNT2_P217_F	Y	TIAM1_P117_F	Y																				
TPEF_seq_44_S88_R	Y	NID1_P677_F	N	GSTM2_P109_R	N	TNFRSF10D_E27_F	Y	TUSC3_P85_R	Y																				
ASCL2_P609_R	Y	GSTM2_P453_R	N	CDH11_E102_R	Y	WT1_E32_F	Y																						

Supplementary Table 7 (cont.)

SOX17_P303_F	Y	GRB7_E71_R	N	ADCYAP1_P455_R	Y	DAB2IP_E18_R	Y
TNK1_P41_R	Y	KCNK4_P171_R	N	COL1A1_P5_F	Y	TIAM1_P117_F	Y
DCC_E53_R	Y	HTR1B_E232_R	Y	TWIST1_P355_R	Y	CDH11_P354_R	Y
NRG1_E74_F	Y	GFAP_P56_R	N	ATP10A_P147_F	Y	PITX2_E24_R	Y
AGTR1_P41_F	Y	SOX1_P294_F	Y	FRZB_E186_R	Y	CHFR_P501_F	Y
MAF_P826_R	Y	IL1A_E113_R	N	SMO_P455_R	Y		
IHH_P246_R	Y	PITX2_E24_R	Y	CALCA_E174_R	Y		
TMEFF2_P152_R	Y	HOXA5_P479_F	Y	HCK_P858_F	Y		
PRKCDBP_E206_F	Y	PADI4_P1011_R	N	PENK_E26_F	Y		
IGFBP2_P306_F	Y	PLAT_E158_F	N	MMP2_E21_R	Y		
COL18A1_P365_R	Y	ASCL1_P747_F	Y	TIAM1_P117_F	Y		
TFAP2C_P765_F	Y	HTR1B_P222_F	Y	TSP50_P137_F	Y		
RAB32_E314_R	Y	DSG1_E292_F	N	PTCH2_P568_R	Y		
CCKBR_P480_F	Y	PRSS8_E134_R	Y	BMP3_E147_F	Y		
SLC5A8_P38_R	Y	AIM2_E208_F	N	GUCY2D_E419_R	Y		
FOSL2_E384_R	Y	CSF3_P309_R	N	ASCL2_P609_R	Y		
EGFR_P260_R	Y	CHI3L2_E10_F	N	GDF10_P95_R	Y		
EPHA7_E6_F	Y	SOX17_P303_F	Y	CCND2_P887_F	Y		
DAPK1_E46_R	Y	RARA_P176_R	N	GDF10_E39_F	Y		
PTGS2_P524_R	Y	ZIM3_P451_R	Y	FLT3_P302_F	Y		
WT1_P853_F	Y	DIO3_E230_R	Y	IGFBP7_P297_F	Y		
PDGFRA_E125_F	N	DLK1_E227_R	Y	SLC5A8_P38_R	Y		
NTSR1_P318_F	Y	ASB4_P391_F	N	FGF5_E16_F	Y		
IGSF4_P454_F	Y	SOX17_P287_R	Y	CALCA_P75_F	Y		
CYP1B1_E83_R	Y	CAPG_E228_F	N	POMC_P53_F	Y		
RBP1_P426_R	Y	CSF1R_E26_F	N	DCC_E53_R	Y		
PLXDC2_E337_F	Y	ARHGDIB_P148_R	N	KIT_P405_F	Y		
WT1_E32_F	Y	FZD9_E458_F	Y	ZIM2_P22_F	Y		
PALM2-AKAP2_P183_R	Y	CYP2E1_P416_F	N	ASCL1_P747_F	Y		
F2R_P839_F	Y	THBS2_P605_R	N	TUSC3_P85_R	Y		
RASGRF1_E16_F	Y	TAL1_P594_F	Y	TMEFF1_P234_F	Y		
NOTCH3_P198_R	Y	MMP14_P208_R	N	POMC_P400_R	Y		
CEBPA_P706_F	Y	SEPT9_P374_F	Y	POMC_E254_F	Y		
EVI1_E47_R	Y	FGFR4_P610_F	N	FGF3_E198_R	Y		
HS3ST2_P546_F	Y	ZP3_P220_F	N	BDNF_E19_R	Y		
LOX_P313_R	Y	IGFBP5_P9_R	Y	EYA4_P508_F	Y		
DAPK1_P345_R	Y	SEPT5_P441_F	Y	ROR2_E112_F	Y		
CDH11_E102_R	Y	SPARC_P195_F	N	SGCE_E149_F	Y		
ERG_E28_F	Y	S100A4_E315_F	N	HCK_P46_R	Y		
GRB10_E85_R	Y	PENK_P447_R	Y	ADCYAP1_E163_R	Y		
GATA6_P21_R	Y	S100A2_E36_R	N	TPEF_seq_44_S36_F	Y		
CCNA1_E7_F	Y	PTHR1_P258_F	N	ADAMTS12_P250_R	Y		
EPHA5_P66_F	Y	TNFRSF10C_P7_F	Y	HOXA5_E187_F	Y		
HOXB13_E21_F	Y	CD9_P504_F	Y	NRG1_E74_F	Y		
NPY_E31_R	Y	RAD50_P191_F	Y	MCAM_P265_R	Y		
EPHB1_E202_R	Y	MYH11_P22_F	Y	ER_seq_a1_S60_F	Y		
IGFBP7_P297_F	Y	IHH_E186_F	Y	MT1A_P600_F	Y		
COL18A1_P494_R	Y	BMP4_P199_R	Y	GSTM1_P266_F	Y		
NOTCH3_E403_F	Y	DCC_P471_R	Y	GSTM2_P453_R	N		
TUSC3_P85_R	Y	PTPRH_E173_F	N	EPHA5_P66_F	Y		
MT1A_P49_R	Y	BCR_P346_F	Y	MFAP4_P197_F	N		
BMP2_E48_R	Y	EYA4_E277_F	Y	RET_P717_F	N		
IGFBP1_E48_R	Y	SERPINE1_P519_F	N	HIC2_P528_R	Y		
ERBB4_P255_F	Y	PTK6_E50_F	Y				
IGFBP2_P353_R	Y	TBX1_P885_R	Y				
CALCA_P75_F	Y	ESR1_P151_R	Y				
ADCYAP1_P455_R	Y	CD81_P272_R	Y				
PAX6_P50_R	Y	SEMA3A_P658_R	N				
IGF2AS_E4_F	Y	TGFBI_P173_F	Y				
GABRB3_P92_F	Y	HGF_E102_R	N				
RIPK4_P172_F	Y	CTSL_P264_R	Y				
TWIST1_E117_R	Y	TNK1_P221_F	Y				
ALK_E183_R	Y	NOTCH3_P198_R	Y				
EPHA3_P106_R	Y	VAMP8_P114_F	N				
TBX1_P885_R	Y	EPHA2_P340_R	N				
PAX6_E129_F	Y	BAX_E281_R	Y				
RET_seq_53_S374_F	Y	CPA4_E20_F	N				
TWIST1_P355_R	Y	CD82_P557_R	Y				
GRB10_P260_F	Y	IGFBP3_P423_R	Y				
BDNF_E19_R	Y	CTSD_P726_F	Y				
CDH1_P45_F	Y	MYOD1_E156_F	Y				
EPHA5_E158_R	Y	SEPT5_P464_R	Y				
TRIP6_P1090_F	Y	TPEF_seq_44_S88_R	Y				
DIO3_P90_F	Y	CPA4_P1265_R	N				
OPCML_E219_R	Y						
FGF5_P238_R	Y						
HRASLS_E72_R	Y						
ASCL1_E24_F	Y						
EPHA7_P205_R	Y						
HOXA11_E35_F	Y						
HLF_E192_F	Y						
IRAK3_P185_F	Y						
INHA_P1189_F	Y						
PYCARD_P150_F	Y						
MT1A_P600_F	Y						
LOX_P71_F	Y						
PDGFRA_P1429_F	Y						
FLT4_P180_R	Y						
GAS7_E148_F	Y						
DST_E31_F	Y						
TEK_E75_F	N						
THBS1_E207_R	Y						
ROR2_E112_F	Y						
IGFBP1_P12_R	Y						
HIC2_P498_F	Y						
MMP2_E21_R	Y						
IHH_P529_F	Y						
INHA_P1144_R	Y						
PROK2_P390_F	Y						
NRG1_P558_R	Y						
TGFBI_P173_F	Y						
FZD9_P175_F	Y						
MEST_P62_R	Y						

Supplementary Table 7 (cont.)

HYPOMETHYLATION

Pancreatic cancer (n:98)	CGI	Bladder cancer (n:80)	CGI	Glioma (n:64)	CGI	Lymphoid neoplasias (n:	CGI	Endometrium cancer* (	CGI	Head and neck cancer (n:20)	CGI	Ovarian cancer* (n:16)	CGI	Melanoma (n:5)	CGI	Prostate cancer (n:4)	CGI	Colon cancer (n:3)	CGI	Myeloid neoplasias (n	CGI	Stomach cancer (n:2)	CGI	Lung cancer* (n:1)	CGI	Breast cancer* (n:1)	CGI
SERPINB5_P19_R	Y	TRIM29_P261_F	N	MPO_P883_R	N	DDR1_P332_R	N	BLK_P14_F	N	MMP2_P303_R	Y	MEST_P4_F	Y	EVI2A_P94_R	N	MEST_P4_F	Y	PI3_E107_F	N	TRIP6_P1274_R	Y	TNFSF8_P184_F	Y	SPI1_P48_F	N	PI3_E107_F	N
S100A2_P1186_F	N	PI3_E107_F	N	IL8_E118_R	N	BLK_P14_F	N	IFNG_E293_F	N	ERN1_P809_R	Y	PI3_E107_F	N	IFNG_E293_F	N	DLC1_P695_F	N	NEU1_P745_F	Y	LMO2_E148_F	N	CSF3R_P8_F	N				
PI3_P274_R	N	CEACAM1_P44_R	N	NOTCH4_E4_F	N	LTA_P214_R	N	MEST_P62_R	Y	MT1A_P600_F	Y	NBL1_P24_F	N	PI3_P1394_R	N	MEST_P62_R	Y	S100A2_E36_R	N								
SFN_E118_F	Y	IFNG_E293_F	N	CASP10_P334_F	N	NOTCH4_P938_F	N	EMR3_E61_F	N	DLC1_E276_F	N	PTPN6_P282_R	N	TNFSF8_P184_F	Y	PTPN6_P282_R	N										
IAPP_E280_F	N	NOS2A_E117_R	N	SERPINE1_P519_F	N	RUNX3_P393_R	Y	PTHLH_E251_F	N	RAB32_P493_R	Y	WEE1_P924_R	N	VAV1_E9_F	Y												
TRIM29_P135_F	N	NOS3_P38_F	N	MMP14_P13_F	Y	BLK_P668_R	N	NBL1_P24_F	N	ICAM1_P386_R	Y	S100A2_P1186_F	N														
PTPRH_P255_F	N	PSCA_P135_F	N	CCL3_E53_R	N	PADI4_P1011_R	N	SPP1_P647_F	N	JAK3_P156_R	N	NID1_P677_F	N														
NOS2A_E117_R	N	PTPRH_P255_F	N	CASP10_P186_F	N	RUNX3_P247_F	Y	CEACAM1_P44_R	N	RUNX3_P247_F	Y	CTLA4_E176_R	N														
CYP2E1_P416_F	N	TMPRSS4_E83_F	N	S100A2_E36_R	N	PLA2G2A_P528_F	N	MST1R_E42_R	Y	TNFSF8_E258_R	N	GLI2_E90_F	N														
SFTPA1_E340_R	N	SRC_E100_R	N	HLA-DPA1_P205_R	N	HLA-DOB_E432_R	N	NID1_P677_F	N	HLA-DPA1_P28_R	N	MST1R_E42_R	Y														
CREBBP_P712_R	Y	CDH17_P376_F	N	MMP9_P189_F	N	LCK_E28_F	Y	PTHLH_P15_R	N	RUNX3_P393_R	Y	GPATC3_P410_R	N														
NDN_P1110_F	N	AATK_E63_R	N	JAK3_P1075_R	N	DES_P1006_R	N	MEST_P4_F	Y	OSM_P188_F	Y	TRIM29_E189_F	Y														
TRIM29_E189_F	Y	THBS2_P605_R	N	TRIP6_P1090_F	Y	PMP22_P975_F	N	PI3_E107_F	N	MPO_P883_R	N	GLI2_P295_F	Y														
CSF2_E248_R	N	CDH17_E31_F	N	PTHR1_P258_F	N	TMPRSS4_P552_F	N	PTPN6_P282_R	N	DLC1_P695_F	N	EMR3_E61_F	N														
ITK_P114_F	N	KRT5_E196_R	Y	TRIP6_P1274_R	Y	RHOH_P953_R	N	PTPRH_E173_F	N	FANCE_P356_R	Y	MSH2_P1008_F	Y														
TRIM29_P261_F	N	P2RX7_P597_F	N	PADI4_P1011_R	N	IL18BP_E285_F	N	EMR3_P39_R	N	RUNX3_E27_R	N	IFNG_E293_F	N														
TRIP6_P1090_F	Y	IL1RN_E42_F	N	MMP2_P303_R	Y	KLK11_P103_R	N	IL2_P607_R	N	SERPINA5_P156_F	N																
IL1RN_E42_F	N	AIM2_P624_F	N	CSF3R_P8_F	N	RUNX3_E27_R	N	CLDN4_P1120_R	N	HLA-DPA1_P205_R	N																
SEPT9_P58_R	Y	NBL1_P24_F	N	S100A2_P1186_F	N	BGN_P333_R	N	TRIP6_P1090_F	Y	TNFSF8_P184_F	Y																
GLI2_P295_F	Y	PI3_P274_R	N	SH3BP2_E18_F	N	AOC3_P890_R	N	ASB4_P52_R	N	DLC1_P88_R	N																
TFF2_P178_F	N	NID1_P677_F	N	GSTM2_E153_F	Y	LEFTY2_P561_F	N	GFI1_P208_R	Y																		
CXCL9_E268_R	N	SERPINB5_P19_R	Y	EMR3_P39_R	N	CCL3_E53_R	N	TRIP6_P1274_R	Y																		
TFF1_P180_R	N	S100A2_P1186_F	N	PSCA_E359_F	N	IL12B_P1453_F	Y																				
MST1R_E42_R	Y	SLC14A1_E295_F	N	HDAC1_P414_R	Y	NOS2A_P288_R	N																				
PI3_E107_F	N	CLDN4_P1120_R	N	CASP10_E139_F	N	NAT2_P11_F	N																				
GLI2_E90_F	N	EMR3_E61_F	N	PRSS1_E45_R	N	E2F5_P516_R	Y																				
NBL1_P24_F	N	PTPRH_E173_F	N	ALPL_P433_F	Y	MPL_P657_F	N																				
CSF2_P605_F	N	BCR_P422_F	Y	RIPK3_P24_F	N	PTHR1_P258_F	N																				
NOS3_P38_F	N	TRIM29_P135_F	N	EMR3_E61_F	N	PRSS1_E45_R	N																				
TMPRSS4_P552_F	N	EMR3_P39_R	N	RIPK3_P124_F	N	PLA2G2A_E268_F	N																				
UGT1A1_P315_R	N	VAMP8_P114_F	N	TMPRSS4_P552_F	N	CPA4_E20_F	N																				
NID1_P677_F	N	MST1R_E42_R	Y	HLA-DPA1_P28_R	N	PI3_P1394_R	N																				
NBL1_E205_R	N	PTPN6_P282_R	N	GFAP_P1214_F	N	TRIM29_P135_F	N																				
S100A2_E36_R	N	TRPM5_P979_F	N	LEFTY2_P561_F	N	EPHX1_E152_F	N																				
LCN2_P141_R	N	IGFBP1_P12_R	Y	STAT5A_P704_R	N	EPHX1_P1358_R	N																				
UGT1A1_E11_F	N	VAMP8_E7_F	N	CD86_P3_F	N	DLC1_P695_F	N																				
PRSS1_E45_R	N	SFN_E118_F	Y	TNFSF10_E53_F	N	DSG1_P159_R	N																				
IFNG_E293_F	N	TFF2_P178_F	N	NOS2A_P288_R	N	SFTPB_P689_R	N																				
NCL_P1102_F	Y	IGFBP1_E48_R	Y	KLK11_P103_R	N	IGF1_P933_F	N																				
APBA2_P305_R	N	EDNRB_P709_R	N	FGFR2_P460_R	Y	CLDN4_P1120_R	N																				
SPI1_P929_F	N	GPR116_E328_R	N	SPDEF_P6_R	N	IGF1_E394_F	N																				
FGFR4_P610_F	N	CXCL9_E268_R	N	STAT5A_E42_F	N	HLA-DPB1_P540_F	N																				
SRC_P164_F	N	VAMP8_P241_F	N	VAV1_P317_F	N	CSF1R_P73_F	N																				
SEPT9_P374_F	Y	UGT1A1_P315_R	N	DSG1_P159_R	N	AIM2_E208_F	N																				
EMR3_P39_R	N	PGR_P790_F	N	FAS_P322_R	N	IL1B_P829_F	N																				
KRT1_P798_R	N	GLI2_P295_F	Y	SPP1_E140_R	N	GRB7_P160_R	N																				
PRSS8_E134_R	Y	CASP8_E474_F	N	CHI3L2_E10_F	N	MAGEC3_E307_F	N																				
MST1R_P87_R	Y	GABRA5_P862_R	N	PGR_P790_F	N	AATK_E63_R	N																				
CPA4_E20_F	N	TRIP6_P1090_F	Y	TNFSF8_P184_F	Y	MMP9_E88_R	N																				
IFNG_P188_F	N	AIM2_E208_F	N	TJP2_P518_F	Y	KRT13_P676_F	N																				
NOS2A_P288_R	N	NID1_P714_R	N	GSTM2_P453_R	N	IAPP_E280_F	N																				
SLC22A3_P634_F	Y	HDAC1_P414_R	Y	ITK_P114_F	N	SMARCB1_P220_R	Y																				
KIAA0125_E29_F	N	TIMP1_P615_R	N	CPA4_E20_F	N	IFNG_P188_F	N																				
NOTCH4_E4_F	N	BRCA1_P835_R	Y	PI3_P1394_R	N	KRT1_P798_R	N																				
SNCG_E119_F	N	PTK6_E50_F	Y	MPO_E302_R	N																						
ZP3_P220_F	N	ARHGDIB_P148_R	N	ACVR1_P983_F	N																						
PTK6_E50_F	Y	PRSS8_E134_R	Y	GSTM2_P109_R	N																						
CLDN4_P1120_R	N	VAV1_E9_F	Y	LTB4R_E64_R	N																						
MPO_E302_R	N	KRT13_P341_R	N	CCR5_P630_R	N																						
BRCA1_P835_R	Y	OSM_P188_F	Y	KRT1_P798_R	N																						
LCN2_P86_R	N	GABRA5_P1016_F	N	AOC3_P890_R	N																						
GUCY2F_P255_F	N	RIPK3_P124_F	N	IL10_P85_F	N																						
PTPRH_E173_F	N	TRIM29_E189_F	Y	SPI1_E205_F	Y																						
PTPN6_P282_R	N	CSF1R_E26_F	N	IFNG_E293_F	N																						
GML_P281_R	N	JAK3_P1075_R	N																								
PSCA_P135_F	N	NBL1_E205_R	N																								
LIG3_P622_R	N	LCN2_P86_R	N																								
CEACAM1_P44_R	N	MMP19_E274_R	N																								
WNT8B_E487_F	N	GLI2_E90_F	N																								
BMP4_P199_R	Y	ZP3_P220_F	N																								
GABRG3_E123_R	N	MMP10_E136_R	N																								
MAPK4_E273_R	N	HPN_P823_F	N																								
CAPG_E228_F	N	AFF3_P122_F	N																								
FGF1_P357_R	N	SRC_P164_F	N																								
DLC1_P695_F	N	PADI4_E24_F	N																								
VAMP8_P241_F	N	CAPG_E228_F	N																								
APOA1_P261_F	N	MAPK10_E26_F	N																								
MAGEC3_E307_F	N	SFTPA1_E340_R	N																								
CCR5_P630_R	N	PSCA_E359_F	N																								
PWCR1_P811_F	N	APBA2_P305_R	N																								
TRIP6_P1274_R	Y																										
CASP8_E474_F	N																										
CTLA4_P1128_F	N																										
GABRA5_P862_R	N																										
GFAP_P56_R	N																										
MMP10_E136_R	N																										
KLK10_P268_R	N																										
IL12B_P1453_F	Y																										
PADI4_P1011_R	N																										
PWCR1_P357_F	N																										
AATK_E63_R	N																										
HLA-DOB_E432_R	N																										
IL1RN_P93_R	N																										
FRK_P36_F	N																										
EPHA2_P203_F	Y																										
SPP1_P647_F	N																										
PTHR1_P258_F	N																										
BAX_E281_R	Y																										

Supplementary Table 8. List of CpG sites with highly-specific methylation changes (hypermethylation and hypomethylation) occurring only in one tumor type arranged by increasing values. CpG island associated (CGI): Yes (Y) or not (N). (*: methylation differences calculated by different method due to the low number of samples).

HYPERMETHYLATION

Head and neck cancer (n:97)	CGI	Lymphoid neoplasias (n:69)	CGI	Prostate cancer (n:28)	CGI	Pancreatic cancer (n:26)	CGI	Glioma (n:15)	CGI	Endometrium cancer* (n:4)	CGI	Melanoma (n:4)	CGI	Colon cancer (n:3)	CGI	Ovarian cancer* (n:3)	CGI	Bladder cancer (n:2)	CGI	Lung cancer* (n:2)	CGI	Testis cancer* (n:2)	CGI	Stomach cancer (n:1)	CGI	Myeloid neoplasias (n:1)	CGI
LCN2_P141_R	N	IGSF4_P86_R	Y	RARB_P60_F	Y	FGF8_P473_F	Y	TES_P182_F	Y	HLA-F_E402_F	Y	MET_E333_F	Y	ALK_P28_F	Y	GLI3_P453_R	Y	TERT_E20_F	Y	JAK3_P156_R	N	TBX1_P520_F	N	CCKAR_P270_F	N	IGSF4C_E65_F	Y
PI3_P274_R	N	FAT_P279_R	Y	PDGFRB_P273_F	Y	SEZ6L_P249_F	Y	TNFRSF10A_P171_F	Y	ABO_P312_F	Y	COL1A2_P407_R	N	CSPG2_E38_F	Y	THY1_P20_R	Y	NPR2_P618_F	Y	GP1BB_P278_R	Y	GPATC3_P410_R	N				
KRT13_P341_R	N	RAB32_P493_R	Y	PDGFRB_E195_R	N	FLT1_P302_F	Y	TNFRSF10A_P91_F	Y	MLH1_P381_F	Y	IL17RB_P788_R	Y	PDE1B_P263_R	Y	DDR2_P743_R	N										
SLC22A18_P216_R	N	IGF2_E134_R	Y	GSTP1_P74_F	Y	FLT1_P615_R	Y	TES_E172_F	Y	JAK3_E64_F	Y	IL6_E168_F	N														
TMPRSS4_E83_F	N	FGFR2_P460_R	Y	GSTP1_seq_38_S153_R	Y	SEZ6L_P299_F	Y	AHR_P166_R	Y																		
VAMP8_P241_F	N	PTGS2_P308_F	Y	RARB_E114_F	Y	FLT1_E444_F	Y	MEST_E150_F	Y																		
KRT5_E196_R	Y	SEMA3C_E49_R	Y	NEU1_P745_F	Y	NEFL_E23_R	Y	PCTK1_E77_R	Y																		
TRIP6_P1274_R	Y	TFAP2C_E260_F	Y	TRIP6_E33_F	Y	COL1A2_P48_R	Y	GFI1_P45_R	Y																		
DSG1_P159_R	N	ONECUT2_E96_F	Y	SERPINE1_E189_R	Y	MYH11_P236_R	Y	MEST_P4_F	Y																		
LY6G6E_P45_R	N	FAT_P973_R	Y	PDGFRB_P343_F	Y	MMP2_P197_F	Y	DNAJC15_P65_F	Y																		
PSCA_P135_F	N	IMPACT_P234_R	Y	HFE_E273_R	Y	COL1A1_P5_F	Y	AHR_E103_F	Y																		
JAK3_P1075_R	N	TJP1_P390_F	Y	HHIP_E94_F	Y	SMO_P455_R	Y	DSP_P36_F	Y																		
MST1R_E42_R	Y	IGFBP3_E65_R	Y	HDAC9_E38_F	N	PTCH2_P568_R	Y	TAL1_E122_F	Y																		
HLA-DOB_E432_R	N	CDH11_P203_R	Y	HDAC9_P137_R	N	GDF10_P95_R	Y	ICA1_P72_R	Y																		
EMR3_P39_R	N	CDH1_P52_R	Y	GADD45A_P737_R	N	GDF10_E39_F	Y	WRN_P969_F	Y																		
NBL1_E205_R	N	ETV1_P515_F	Y	NGFR_P355_F	Y	POMC_P53_F	Y																				
NBL1_P24_F	N	EGFR_E295_R	Y	APC_P280_R	Y	ZIM2_P22_F	Y																				
ZIM3_P718_R	N	NTRK2_P10_F	Y	SPARC_E50_R	Y	TMEFF1_P234_F	Y																				
FGF1_P357_R	N	CTSL_P81_F	Y	CDKN1B_P1161_F	N	POMC_E254_F	Y																				
MAP3K8_P1036_F	Y	RBP1_E158_F	Y	PTCH2_E173_F	Y	FGF3_E198_R	Y																				
AATK_E63_R	N	FGFR2_P266_R	Y	KLK10_P268_R	N	SGCE_E149_F	Y																				
SERPINB5_P19_R	Y	DAPK1_P10_F	Y	TMEFF1_P626_R	Y	ADCYAP1_E163_R	Y																				
MSH2_P1008_F	Y	RET_seq_54_S260_F	Y	PYCARD_E87_F	Y	TPEF_seq_44_S36_F	Y																				
CREBBP_P712_R	Y	TJP1_P326_R	Y	PYCARD_P393_F	N	MCAM_P265_R	Y																				
MMP14_P13_F	Y	ERBB4_P541_F	Y	VIM_P811_R	Y	RET_P717_F	N																				
GRB7_P160_R	N	NTRK2_P395_R	Y	RARA_E128_R	N	HIC2_P528_R	Y																				
SFN_E118_F	Y	SOX2_P546_F	Y	SLC14A1_E295_F	N																						
GLI2_E90_F	N	TNK1_P41_R	Y	SLC5A5_E60_F	Y																						
MST1R_P87_R	Y	MAF_P826_R	Y																								
TNFRSF1A_P678_F	N	IHH_P246_R	Y																								
GLI2_P295_F	Y	IGFBP2_P306_F	Y																								
IL1RN_E42_F	N	COL18A1_P365_R	Y																								
CXCL9_E268_R	N	RAB32_E314_R	Y																								
FGF1_E5_F	N	CCKBR_P480_F	Y																								
FER_P581_F	N	EGFR_P260_R	Y																								
SEPT9_P58_R	Y	EPHA7_E6_F	Y																								
TRIM29_P135_F	N	DAPK1_E46_R	Y																								
SRC_P164_F	N	PDGFRA_E125_F	N																								
WEE1_P924_R	N	IGSF4_P454_F	Y																								
EGF_E339_F	N	PLXDC2_E337_F	Y																								
AATK_P519_R	Y	PALM2-AKAP2_P183_R	Y																								
CLDN4_P1120_R	N	F2R_P839_F	Y																								
CSF1R_P73_F	N	CEBPA_P706_F	Y																								
KRT5_P308_F	N	EVI1_E47_R	Y																								
FRK_P36_F	N	LOX_P313_R	Y																								
EPHA2_P203_F	Y	DAPK1_P345_R	Y																								
RIPK3_P124_F	N	GRB10_E85_R	Y																								
IL12B_P392_R	N	HOXB13_E21_F	Y																								
KLK11_P103_R	N	NOTCH3_E403_F	Y																								
IGF1_E394_F	N	MT1A_P49_R	Y																								
PADI4_P1158_R	N	BMP2_E48_R	Y																								
HOXB2_P99_F	Y	IGFBP1_E48_R	Y																								
FASTK_P598_R	Y	ERBB4_P255_F	Y																								
TRIM29_E189_F	Y	IGFBP2_P353_R	Y																								
LIG3_P622_R	N	PAX6_P50_R	Y																								
SPDEF_P6_R	N	RIPK4_P172_F	Y																								
OGG1_E400_F	Y	PAX6_E129_F	Y																								
CEACAM1_P44_R	N	GRB10_P260_F	Y																								
CALCA_P171_F	Y	CDH1_P45_F	Y																								
DES_P1006_R	N	HRASLS_E72_R	Y																								
NPR2_P1093_F	Y	EPHA7_P205_R	Y																								
NID1_P677_F	N	HLF_E192_F	Y																								
KCNK4_P171_R	N	INHA_P1189_F	Y																								
GFAP_P56_R	N	LOX_P71_F	Y																								
IL1A_E113_R	N	PDGFRA_P1429_F	Y																								
HOXA5_P479_F	Y	DST_E31_F	Y																								
PADI4_P1011_R	N	THBS1_E207_R	Y																								
PLAT_E158_F	N	IHH_P529_F	Y																								
DSG1_E292_F	N	INHA_P1144_R	Y																								
PRSS8_E134_R	Y																										
AIM2_E208_F	N																										
CSF3_P309_R	N																										
ZIM3_P451_R	Y																										
ASB4_P391_F	N																										
CAPG_E228_F	N																										
CSF1R_E26_F	N																										
CYP2E1_P416_F	N																										
THBS2_P605_R	N																										
MMP14_P208_R	N																										
FGFR4_P610_F	N																										
ZP3_P220_F	N																										
S100A4_E315_F	N																										
S100A2_E36_R	N																										
PTHR1_P258_F	N																										
RAD50_P191_F	Y																										
PTPRH_E173_F	N																										
PTK6_E50_F	Y																										
SEMA3A_P658_R	N																										
HGF_E102_R	N																										
CTSL_P264_R	Y																										
TNK1_P221_F	Y																										
VAMP8_P114_F	N																										
EPHA2_P340_R	N																										
CPA4_E20_F	N																										
CD82_P557_R	Y																										
CTSD_P726_F	Y																										
CPA4_P1265_R	N																										

Supplementary Table 8 (cont.)

HYPOMETHYLATION

Pancreatic cancer (n:35)	CGI	Glioma (n:29)	CGI	Bladder cancer (n:27)	CGI	Lymphoid neoplasias (n:27)	CGI	Head and neck cancer (n:1(	CGI	Endometrium cancer* (r	CGI	Ovarian cancer* (n:4)	CGI	Colon cancer (1)	CGI	Melanoma (n:1)	CGI	Lung cancer* (n: 1)	CGI	Testis cancer* (n:1)	CGI	Myeloid neoplasias (n:1)	CGI
CYP2E1_P416_F	N	IL8_E118_R	N	TMPRSS4_E83_F	N	DDR1_P332_R	N	ERN1_P809_R	Y	PTHLH_E251_F	N	WEE1_P924_R	N	NEU1_P745_F	Y	EVI2A_P94_R	N	SPI1_P48_F	N	H19_P1411_R	Y	LMO2_E148_F	N
CREBBP_P712_R	Y	CASP10_P334_F	N	SRC_E100_R	N	LTA_P214_R	N	MT1A_P600_F	Y	PTHLH_P15_R	N	CTLA4_E176_R	N										
NDN_P1110_F	N	SERPINE1_P519_F	N	CDH17_P376_F	N	NOTCH4_P938_F	N	DLC1_E276_F	N	IL2_P607_R	N	GPATC3_P410_R	N										
CSF2_E248_R	N	MMP14_P13_F	Y	THBS2_P605_R	N	BLK_P668_R	N	RAB32_P493_R	Y	ASB4_P52_R	N	MSH2_P1008_F	Y										
SEPT9_P58_R	Y	CASP10_P186_F	N	CDH17_E31_F	N	PLA2G2A_P528_F	N	ICAM1_P386_R	Y	GFI1_P208_R	Y												
TFF1_P180_R	N	MMP9_P189_F	N	KRT5_E196_R	Y	LCK_E28_F	Y	JAK3_P156_R	N														
CSF2_P605_F	N	SH3BP2_E18_F	N	P2RX7_P597_F	N	DES_P1006_R	N	TNFSF8_E258_R	N														
LCN2_P141_R	N	GSTM2_E153_F	Y	AIM2_P624_F	N	PMP22_P975_F	N	FANCE_P356_R	Y														
UGT1A1_E11_F	N	CASP10_E139_F	N	SLC14A1_E295_F	N	RHOH_P953_R	N	SERPINA5_P156_F	N														
NCL_P1102_F	Y	ALPL_P433_F	Y	BCR_P422_F	Y	IL18BP_E285_F	N	DLC1_P88_R	N														
SPI1_P929_F	N	RIPK3_P24_F	N	VAMP8_P114_F	N	BGN_P333_R	N																
FGFR4_P610_F	N	GFAP_P1214_F	N	TRPM5_P979_F	N	NAT2_P11_F	N																
SEPT9_P374_F	Y	STAT5A_P704_R	N	IGFBP1_P12_R	Y	E2F5_P516_R	Y																
MST1R_P87_R	N	CD86_P3_F	N	VAMP8_E7_F	N	MPL_P657_F	N																
SLC22A3_P634_F	Y	TNFSF10_E53_F	N	IGFBP1_E48_R	Y	PLA2G2A_E268_F	N																
KIAA0125_E29_F	N	FGFR2_P460_R	Y	EDNRB_P709_R	N	EPHX1_E152_F	N																
SNCG_E119_F	N	SPDEF_P6_R	N	GPR116_E328_R	N	EPHX1_P135B_R	N																
GUCY2F_P255_F	N	STAT5A_E42_F	N	NID1_P714_R	N	SFTPB_P689_R	N																
GML_P281_R	N	VAV1_P317_F	N	TIMP1_P615_R	N	IGF1_P933_F	N																
LIG3_P622_R	N	FAS_P322_R	N	ARHGDIB_P148_R	N	IGF1_E394_F	N																
WNT8B_E487_F	N	SPP1_E140_R	N	KRT13_P341_R	N	HLA-DPB1_P540_F	N																
BMP4_P199_R	Y	CHI3L2_E10_F	N	GABRA5_P1016_F	N	CSF1R_P73_F	N																
GABRG3_E123_R	N	TJP2_P518_F	N	CSF1R_E26_F	N	IL1B_P829_F	N																
MAPK4_E273_R	N	GSTM2_P453_R	N	MMP19_E274_R	N	GRB7_P160_R	N																
FGF1_P357_R	N	ACVR1_P983_F	N	HPN_P823_F	N	MMP9_E88_R	N																
APOA1_P261_F	N	GSTM2_P109_R	N	PADI4_E24_F	N	KRT13_P676_F	N																
PWCR1_P811_F	N	LTB4R_E64_R	N	MAPK10_E26_F	N	SMARCB1_P220_R	Y																
CTLA4_P1128_F	N	IL10_P85_F	N																				
GFAP_P56_R	N	SPI1_E205_F	Y																				
KLK10_P268_R	N																						
PWCR1_P357_F	N																						
IL1RN_P93_R	N																						
FRK_P36_F	N																						
EPHA2_P203_F	Y																						

Supplementary Table 9. List of CpG sites differentially methylated in cancer cell lines. CpG island associated (CGI): Yes (Y) or not (N). TSS: transcription start site.

CpG site (n: 41)	CGI	Annotation	Distance to TSS
CCND2_P898_R	Y	cyclin D2 (CCND2)	-898
CDKN1C_P626_F	Y	cyclin-dependent kinase inhibitor 1C (p57, Kip2) (CDKN1C)	-626
COL18A1_P365_R	Y	collagen, type XVIII, alpha 1 (COL18A1), transcript variant 3	-365
COL1A2_P48_R	Y	collagen, type I, alpha 2 (COL1A2)	-48
CTLA4_P1128_F	N	cytotoxic T-lymphocyte-associated protein 4 (CTLA4)	-1128
DES_E228_R	Y	desmin (DES)	228
EFNB3_P442_R	Y	ephrin-B3 (EFNB3)	-442
ESR2_E66_F	Y	estrogen receptor 2 (ER beta) (ESR2)	66
FABP3_P598_F	Y	fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3)	-598
FES_E34_R	Y	feline sarcoma oncogene (FES)	34
FES_P223_R	Y	feline sarcoma oncogene (FES)	-223
GABRA5_P1016_F	N	gamma-aminobutyric acid (GABA) A receptor, alpha 5 (GABRA5)	-1016
GABRG3_E123_R	N	gamma-aminobutyric acid (GABA) A receptor, gamma 3 (GABRG3)	123
GABRG3_P75_F	N	gamma-aminobutyric acid (GABA) A receptor, gamma 3 (GABRG3)	-75
GJB2_P791_R	Y	gap junction protein, beta 2, 26kDa (connexin 26) (GJB2)	-791
HCK_P46_R	Y	hemopoietic cell kinase (HCK)	-46
HOXA11_E35_F	Y	homeo box A11 (HOXA11)	35
HTR2A_P853_F	N	5-hydroxytryptamine (serotonin) receptor 2A (HTR2A)	-853
IAPP_E280_F	N	islet amyloid polypeptide (IAPP)	280
IGFBP2_P306_F	Y	insulin-like growth factor binding protein 2, 36kDa (IGFBP2)	-306
KCNK4_E3_F	Y	potassium channel, subfamily K, member 4 (KCNK4), transcript variant 1	3
KIAA0125_E29_F	N	KIAA0125 (KIAA0125)	29
MATK_P64_F	Y	megakaryocyte-associated tyrosine kinase (MATK), transcript variant 1	-64
P2RX7_E323_R	Y	purinergic receptor P2X, ligand-gated ion channel, 7 (P2RX7), transcript variant 2	323
P2RX7_P119_R	N	purinergic receptor P2X, ligand-gated ion channel, 7 (P2RX7), transcript variant 2	-119
PGR_E183_R	N	progesterone receptor (PGR)	183
PMP22_P975_F	N	peripheral myelin protein 22 (PMP22), transcript variant 1	-975
PODXL_P1341_R	Y	podocalyxin-like (PODXL), transcript variant 1	-1341
POMC_E254_F	Y	proopiomelanocortin (adrenocorticotropin/ beta-lipotropin/ alpha-melanocyte stimulating hormone/ beta-melanocyte stimulating hormone/ beta-endorphin) (POMC)	254
PROM1_P44_R	N	prominin 1 (PROM1)	-44
PWCR1_P357_F	N	Prader-Willi syndrome chromosome region 1 (PWCR1) on chromosome 15.	-357
PYCARD_E87_F	Y	PYD and CARD domain containing (PYCARD), transcript variant 2	87
RASGRF1_E16_F	Y	Ras protein-specific guanine nucleotide-releasing factor 1 (RASGRF1), transcript variant 1	16
RET_seq_54_S260_F	Y	ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 4	11
SLC5A8_P38_R	Y	solute carrier family 5 (iodide transporter), member 8 (SLC5A8)	-38
SYBL1_E23_R	Y	synaptobrevin-like 1 (SYBL1)	23
TAL1_E122_F	Y	T-cell acute lymphocytic leukemia 1 (TAL1)	122
TNFRSF10C_E109_F	Y	tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C)	109
TNFRSF1B_E5_F	Y	tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B)	5
USP29_E274_F	N	ubiquitin specific peptidase 29 (USP29)	274
WNT8B_E487_F	N	wingless-type MMTV integration site family, member 8B (WNT8B)	487

Supplementary Table 10. List of CpG sites with brain metasasis-dependent hypermethylation in colorectal cancer patients. CpG island associated (CGI): Yes (Y) or not (N). TSS: transcription start site.

CpG site (n: 41)	CGI	Annotation	Distance to TSS
ALPL_P433_F	Y	alkaline phosphatase, liver/bone/kidney (ALPL)	-433
CCNA1_E7_F	Y	cyclin A1 (CCNA1)	7
CD40_E58_R	Y	CD40 antigen (TNF receptor superfamily member 5) (CD40), transcript variant 2	58
COL18A1_P494_R	Y	collagen, type XVIII, alpha 1 (COL18A1), transcript variant 3	-494
DCC_P177_F	Y	deleted in colorectal carcinoma (DCC)	-177
DES_E228_R	Y	desmin (DES)	228
EPHA5_P66_F	Y	EPH receptor A5 (EPHA5), transcript variant 2	-66
FGF2_P229_F	Y	fibroblast growth factor 2 (basic) (FGF2)	-229
FGF8_P473_F	Y	fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant B	-473
FGFR1_P204_F	Y	fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 1	-204
FZD9_E458_F	Y	frizzled homolog 9 (Drosophila) (FZD9)	458
GALR1_E52_F	Y	galanin receptor 1 (GALR1)	52
GSTM1_P266_F	Y	glutathione S-transferase M1 (GSTM1), transcript variant 2	-266
HHIP_P307_R	Y	hedgehog interacting protein (HHIP)	-307
IPF1_P750_F	Y	insulin promoter factor 1, homeodomain transcription factor (IPF1)	-750
KRAS_E82_F	Y	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog (KRAS), transcript variant a	82
MEG3_E91_F	Y	PREDICTED: maternally expressed 3, transcript variant 10 (MEG3), misc RNA.	91
MMP2_E21_R	Y	matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2)	21
MMP2_P197_F	Y	matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2)	-197
MSH3_P13_R	Y	mutS homolog 3 (E. coli) (MSH3)	-13
NEFL_E23_R	Y	neurofilament, light polypeptide 68kDa (NEFL)	23
NPR2_P618_F	Y	natriuretic peptide receptor B/guanylate cyclase B (atrionatriuretic peptide receptor B) (NPR2)	-618
NRG1_E74_F	Y	neuregulin 1 (NRG1), transcript variant HRG-beta3	74
PDE1B_E141_F	Y	phosphodiesterase 1B, calmodulin-dependent (PDE1B)	141
PDGFB_P719_F	N	platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog) (PDGFB), transcript variant 1	-719
PENK_E26_F	Y	proenkephalin (PENK)	26
PLA2G2A_E268_F	N	phospholipase A2, group IIA (platelets, synovial fluid) (PLA2G2A)	268
PPAT_E170_R	Y	phosphoribosyl pyrophosphate amidotransferase (PPAT)	-266
RBP1_E158_F	Y	retinol binding protein 1, cellular (RBP1)	158
RBP1_P426_R	Y	retinol binding protein 1, cellular (RBP1)	-426
SEPT5_P464_R	Y	septin 5 (SEPT5), transcript variant 2	-464
SERPINE1_P519_F	N	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 (SERPINE1)	-519
SEZ6L_P249_F	Y	seizure related 6 homolog (mouse)-like (SEZ6L)	-249
SLC5A8_E60_R	Y	solute carrier family 5 (iodide transporter), member 8 (SLC5A8)	60
SNRPN_seq_12_S127_F	Y	small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 3	-11
SPARC_E50_R	Y	secreted protein, acidic, cysteine-rich (osteonectin) (SPARC)	50
STAT5A_P704_R	N	signal transducer and activator of transcription 5A (STAT5A)	-704
TBX1_P520_F	N	T-box 1 (TBX1), transcript variant A	-520
TERT_P360_R	Y	telomerase reverse transcriptase (TERT), transcript variant 2	-360
THY1_P20_R	Y	Thy-1 cell surface antigen (THY1)	-20
TJP2_P330_R	Y	tight junction protein 2 (zona occludens 2) (TJP2), transcript variant 1	-330
TPEF_seq_44_S36_F	Y	transmembrane protein with EGF-like and two follistatin-like domains 2 (TMEFF2)	442
ZNF264_E48_R	Y	zinc finger protein 264 (ZNF264)	48

Supplementary Table 11. List of CpG sites with non-cancer disease specific hypomethylation. CpG island associated (CGI): Yes (Y) or not (N).

Dementia (n:96)	CGI
ALPL_P433_F	Y
AOC3_P890_R	N
ARHGDIB_P148_R	N
C4B_E171_F	N
CARD15_P302_R	N
CARD15_P665_F	N
CASP10_E139_F	N
CASP10_P186_F	N
CASP10_P334_F	N
CD34_P780_R	N
CD9_P585_R	Y
CEACAM1_E57_R	N
CSF1R_P73_F	N
DDR2_P743_R	N
DIRAS3_P745_F	Y
EPHX1_E152_F	N
EVI2A_E420_F	N
EYA4_P794_F	Y
FAS_P322_R	N
FGF1_E5_F	N
FGF7_P610_F	N
GP1BB_E23_F	Y
GP1BB_P278_R	Y
GPR116_P850_F	N
GSTM1_P266_F	Y
GSTM1_P363_F	Y
HCK_P858_F	Y
HLA-DPA1_P205_R	N
HLA-DQA2_E93_F	N
IGFBP6_E47_F	N
IL16_P93_R	N
IL1RN_P93_R	N
IL8_E118_R	N
KRT13_P676_F	N
LEFTY2_P561_F	N
LEFTY2_P719_F	N
LTB4R_E64_R	N
MAPK10_E26_F	N
MAPK4_E273_R	N
MEG3_P235_F	Y
MMP14_P13_F	Y
MMP2_P303_R	Y
MOS_P746_F	N
MPO_P883_R	N
MSH3_P13_R	Y
MST1R_P392_F	Y
NBL1_E205_R	N
NBL1_P24_F	N
NGFR_P355_F	Y
NOS2A_P288_R	N
NOTCH4_P938_F	N
OSM_P188_F	Y
OSM_P34_F	N
P2RX7_P597_F	N
PECAM1_E32_R	Y
PEG3_E496_F	Y
PLAGL1_E68_R	Y
PLAGL1_P236_R	Y
POMC_P400_R	Y
PRKCDBP_P352_R	Y
PSCA_E359_F	N
PTK6_E50_F	Y
PTPN6_E171_R	Y
PTPRH_E173_F	N
RARA_P1076_R	N
RBP1_P426_R	Y
S100A2_E36_R	N
SEPT5_P464_R	Y
SERPINE1_P519_F	N
SGCE_P250_R	Y
SLC14A1_E295_F	N
SLC6A8_P409_F	Y
SNRPN_seq_12_S127_F	Y
SNRPN_seq_18_S99_F	Y
SNURF_P2_R	Y
SNURF_P78_F	Y
SOD3_P460_R	N
SPI1_E205_F	Y
STAT5A_E42_F	N
TBX1_P520_F	N
TEK_E75_F	N
TGFB3_E58_R	N
TIMP1_P615_R	N
TNFRSF1A_P678_F	N
TNFSF8_P184_F	Y
TRIP6_P1090_F	Y
TRIP6_P1274_R	Y
TSP50_E21_R	Y
TSP50_P137_F	Y
VAMP8_P114_F	N
VAV1_E9_F	Y
VAV1_P317_F	N
WNT10B_P823_R	Y
XPC_P226_R	Y
ZIM2_E110_F	Y
ZIM2_P22_F	Y

Lupus (n:45)	CGI
AOC3_P890_R	N
B3GALT5_P330_F	N
BLK_P668_R	N
CCL3_E53_R	N
CLDN4_P1120_R	N
CPA4_P1265_R	N
CTLA4_E176_R	N
CYP2E1_E53_R	N
DIRAS3_P745_F	Y
DMP1_P134_F	N
E2F5_P516_R	Y
EVI2A_E420_F	N
FOSL2_E384_R	Y
GPR116_P850_F	N
GSTM1_P363_F	Y
HOXA5_P479_F	Y
IFNG_E293_F	N
IFNG_P188_F	N
IFNG_P459_R	N
IL12B_P392_R	N
IL18BP_E285_F	N
ITK_E166_R	N
ITK_P114_F	N
KRAS_E82_F	Y
KRT5_P308_F	N
LCK_E28_F	Y
LTA_P214_R	N
NOS2A_P288_R	N
PGR_E183_R	N
PI3_P1394_R	N
PLA2G2A_P528_F	N
PMP22_P1254_F	N
PMP22_P975_F	N
PTHR1_E36_R	N
RAN_P581_R	Y
RUNX3_E27_R	N
RUNX3_P247_F	Y
RUNX3_P393_R	Y
SFTPB_P689_R	N
SMARCB1_P220_R	Y
SOD3_P225_F	N
TNFRSF10C_P612_R	N
WNT8B_P216_R	N
Xist_seq_80_S47_R	N
Xist_seq_80_S95_R	N