

Figure S1. Reverse transcription-quantitative PCR analysis of *ETV5* mRNA expression levels in parental and *ETV5* stable transfectants. (A) Hec1a and Hec1a-*ETV5* EC cell lines; (B) Ishikawa and Ishikawa-*ETV5* EC cell lines. \*\* $P < 0.005$ , unpaired Student's t-test. EC, endometrial cancer; *ETV5*, ETS variant transcription factor 5.

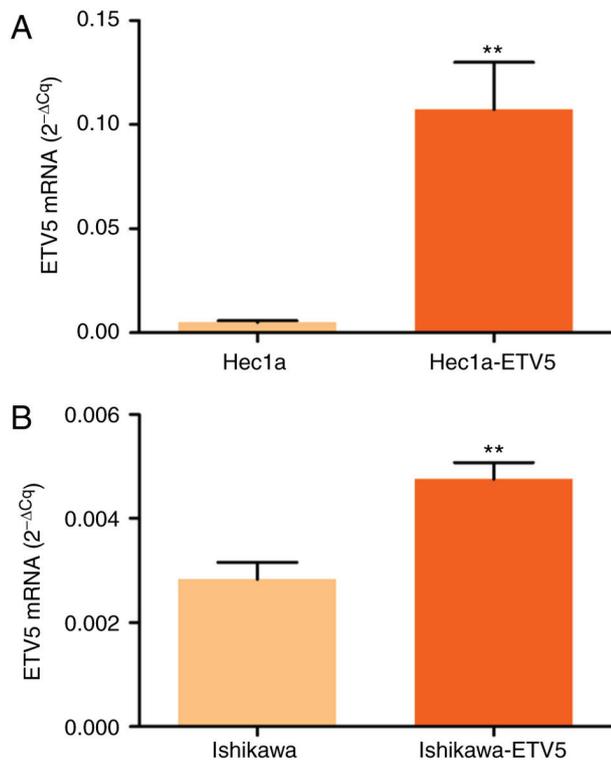


Figure S2. Survival analysis of sample clusters 1-4. Kaplan Meier graphs for (A) recurrence-free and (B) overall survival. Survival curves were constructed using the Kaplan-Meier method, and differences between sample cluster curves were analyzed by log-rank test.

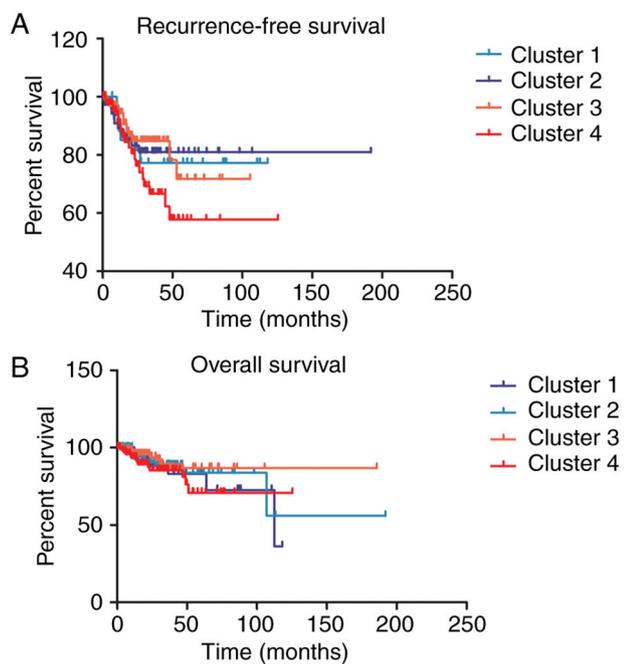


Figure S3. ROC analysis of hub genes. For each gene, ROC curve (left) and mRNA expression levels (right) in control (n=35) and tumor (n=545) samples from The Cancer Genome Atlas Uterine Corpus Endometrioid Cancer cohort are shown. mRNA levels are expressed as  $\text{Log}_2(x+1)$ , where 'x' is the RSEM normalized expression value. ROC, receiver operating characteristic.

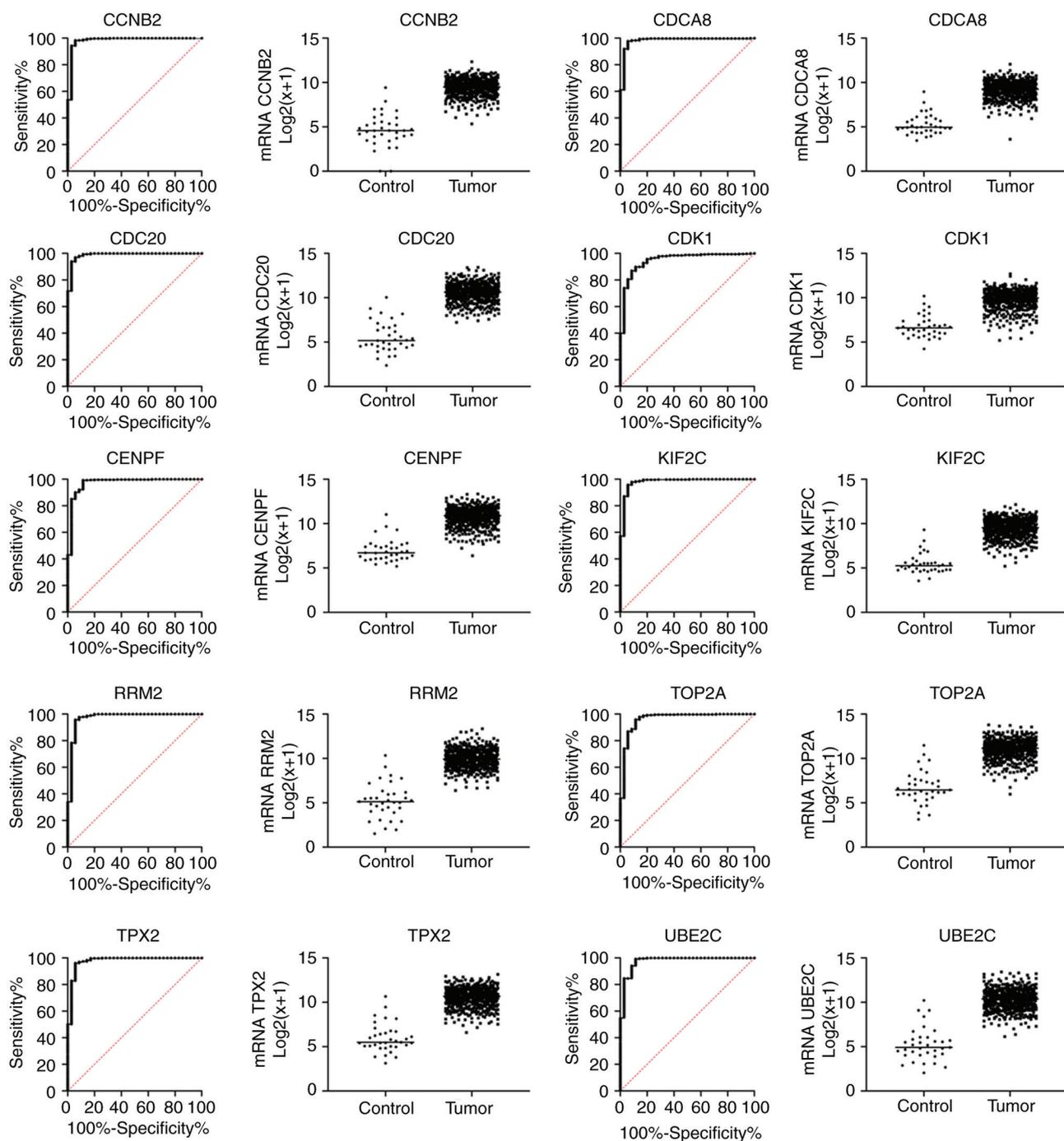


Table SI. Clinicopathological characteristics of the GSE17025 dataset.

Characteristic	n	%
Atrophic endometrium (postmenopausal) (Control group)	12	
Tumor stage		
I	91	100
Histology		
Endometrioid adenocarcinoma	79	86.81
Papillary serous	12	13.19
Histological grade		
Grade 1	30	32.97
Grade 2	36	39.56
Grade 3	25	27.47
Myometrial invasion <sup>a</sup>		
Superficial (<50%)	67	74.44
Deep (>50%)	23	25.56

<sup>a</sup>Myometrial invasion information was available for 90 of 91 tumor samples.

Table SII. Clinicopathological characteristics of The Cancer Genome Atlas Uterine Corpus Endometrioid Cancer dataset.

Characteristic	n	%
Solid tissue normal Tumor samples	16	
Stage <sup>a</sup>		
I	226	68.278
II	19	5.740
III	70	21.148
IV	16	4.834
Histology		
Endometrioid	271	81.381
Mixed	10	3.003
Serous	52	15.616
Histological grade		
Grade 1	78	23.423
Grade 2	91	27.327
Grade 3	164	49.249
Molecular subtype <sup>b</sup>		
POLE	17	7.328
MSI	65	28.017
CN Low	90	38.793
CN High	60	25.862

CN, copy number; MSI, microsatellite instability; POLE, DNA polymerase  $\epsilon$ . <sup>a</sup>Stage information was available for 331 of 333 tumor samples; <sup>b</sup>Molecular subtype information was available for 232 of 333 tumor samples.

Table SIII. Clinicopathological parameters of endometrial cancer tissue samples.

Patient code	FIGO stage	% MI	Grade	Risk group
T1	IA	<50	1	Low
T2	IA	<50	2	Low
T3	IA	<50	2	Low
T4	IA	<50	2	Low
T5	IA	<50	2	Low
T6	IA	<50	2	Low
T7	IA	<50	2	Low
T8	IA	<50	3	Intermediate
T9	IA	<50	3	Intermediate
T10	IA	<50	1	Low
T11	IA	<50	1	Low
T12	IA	<50	1	Low
T13	IA	<50	2	Low
T14	IA	<50	2	Low
T15	IA	<50	2	Low
T16	IA	<50	2	Low
T17	IA	<50	2	Low
T18	IA	<50	2	Low
T19	IA	<50	2	Low
T20	IA	<50	3	Intermediate
T21	IA	<50	3	Intermediate
T22	IB	>50	2	Intermediate
T23	IB	>50	2	Intermediate
T24	IB	>50	2	Intermediate
T25	IB	>50	2	Intermediate
T26	IB	>50	2	Intermediate
T27	IB	>50	2	Intermediate
T28	IB	>50	2	Intermediate
T29	IB	>50	3	High
T30	IB	>50	3	High
T31	IB	>50	3	High
T32	IB	>50	2	Intermediate
T33	IB	>50	3	High
T34	II	>50	2	High
T35	II	>50	1	High
T36	II	>50	2	High
T37	II	>50	3	High
T38	II	>50	3	High
T39	II	>50	3	High
T40	IIIA	>50	3	High
T41	IIIC	>50	3	High
T42	IIIC	>50	3	High

FIGO, International Federation of Gynecology and Obstetrics; MI, myometrial invasion.

Table SIV. Endometrial cancer-associated genes identified using DisGeNET.

Gene	Gene name
<i>AATF</i>	Apoptosis antagonizing transcription factor
<i>ABCB1</i>	ATP binding cassette subfamily B member 1
<i>ABCC1</i>	ATP binding cassette subfamily C member 1
<i>ABCC9</i>	ATP binding cassette subfamily C member 9
<i>ABCF2</i>	ATP binding cassette subfamily F member 2
<i>ACE</i>	Angiotensin I converting enzyme
<i>ACKR3</i>	Atypical chemokine receptor 3
<i>ACP1</i>	Acid phosphatase 1, soluble
<i>ACTB</i>	Actin beta
<i>ADAMTS1</i>	ADAM metalloproteinase with thrombospondin type 1 motif 1
<i>ADH7</i>	Alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide
<i>ADIPOQ</i>	Adiponectin, C1Q and collagen domain containing
<i>ADIPOR1</i>	Adiponectin receptor 1
<i>ADIPOR2</i>	Adiponectin receptor 2
<i>ADM</i>	Adrenomedullin
<i>ADRB3</i>	Adrenoceptor beta 3
<i>AFDN</i>	Afadin, adherens junction formation factor
<i>AGA</i>	Aspartylglucosaminidase
<i>AGPAT2</i>	1-acylglycerol-3-phosphate O-acyltransferase 2
<i>AGT</i>	Angiotensinogen
<i>AGTR1</i>	Angiotensin II receptor type 1
<i>AHR</i>	Aryl hydrocarbon receptor
<i>AKR1B1</i>	Aldo-keto reductase family 1 member B
<i>AKR1B10</i>	Aldo-keto reductase family 1 member B10
<i>AKR1C1</i>	Aldo-keto reductase family 1 member C1
<i>AKR1C3</i>	Aldo-keto reductase family 1 member C3
<i>AKT1</i>	AKT serine/threonine kinase 1
<i>AKT2</i>	AKT serine/threonine kinase 2
<i>ALK</i>	Anaplastic lymphoma receptor tyrosine kinase
<i>AMH</i>	Anti-Mullerian hormone
<i>AMHR2</i>	Anti-Mullerian hormone receptor type 2
<i>ANG</i>	Angiogenin
<i>ANGPT2</i>	Angiopoietin 2
<i>ANXA2</i>	Annexin A2
<i>ANXA5</i>	Annexin A5
<i>APBB3</i>	Amyloid beta precursor protein binding family B member 3
<i>APC</i>	APC, WNT signaling pathway regulator
<i>APEX1</i>	Apurinic/apyrimidinic endodeoxyribonuclease 1
<i>APOE</i>	Apolipoprotein E
<i>APRT</i>	Adenine phosphoribosyltransferase
<i>AQP1</i>	Aquaporin 1 (Colton blood group)
<i>AQP2</i>	Aquaporin 2
<i>AR</i>	Androgen receptor
<i>ARHGAP24</i>	Rho GTPase activating protein 24
<i>ARID1A</i>	AT-rich interaction domain 1A
<i>ARMC3</i>	Armadillo repeat containing 3
<i>ARRB1</i>	Arrestin beta 1
<i>ASCL2</i>	Achaete-scute family bHLH transcription factor 2
<i>ATAD2</i>	ATPase family, AAA domain containing 2
<i>ATM</i>	ATM serine/threonine kinase

Table SIV. Continued.

Gene	Gene name
<i>ATN1</i>	Atrophin 1
<i>ATR</i>	ATR serine/threonine kinase
<i>AURKA</i>	Aurora kinase A
<i>AURKB</i>	Aurora kinase B
<i>BAAT</i>	Bile acid-CoA:amino acid N-acyltransferase
<i>BAD</i>	BCL2 associated agonist of cell death
<i>BARD1</i>	BRCA1 associated RING domain 1
<i>BAX</i>	BCL2 associated X, apoptosis regulator
<i>BBS2</i>	Bardet-Biedl syndrome 2
<i>BCL10</i>	B-cell CLL/lymphoma 10
<i>BCL2</i>	BCL2, apoptosis regulator
<i>BCOR</i>	BCL6 corepressor
<i>BDNF</i>	Brain derived neurotrophic factor
<i>BGN</i>	Biglycan
<i>BHD</i>	Beukes familial hip dysplasia
<i>BHLHE41</i>	Basic helix-loop-helix family member e41
<i>BIRC2</i>	Baculoviral IAP repeat containing 2
<i>BIRC3</i>	Baculoviral IAP repeat containing 3
<i>BIRC5</i>	Baculoviral IAP repeat containing 5
<i>BIRC5</i>	Baculoviral IAP repeat containing 5
<i>BMI1</i>	BMI1 proto-oncogene, polycomb ring finger
<i>BRAF</i>	B-Raf proto-oncogene, serine/threonine kinase
<i>BRCA1</i>	BRCA1, DNA repair associated
<i>BRCA2</i>	BRCA2, DNA repair associated
<i>BRD2</i>	Bromodomain containing 2
<i>BRD7</i>	Bromodomain containing 7
<i>BST2</i>	Bone marrow stromal cell antigen 2
<i>BUB1B</i>	BUB1 mitotic checkpoint serine/threonine kinase B
<i>C10orf67</i>	Chromosome 10 open reading frame 67
<i>C19orf33</i>	Chromosome 19 open reading frame 33
<i>C1GALT1C1</i>	C1GALT1 specific chaperone 1
<i>C1QB</i>	Complement C1q binding protein
<i>C21orf33</i>	Chromosome 21 open reading frame 33
<i>CA2</i>	Carbonic anhydrase 2
<i>CABLES1</i>	Cdk5 and Abl enzyme substrate 1
<i>CACUL1</i>	CDK2 associated cullin domain 1
<i>CAD</i>	Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
<i>CADMI</i>	Cell adhesion molecule 1
<i>CALB1</i>	Calbindin 1
<i>CALD1</i>	Caldesmon 1
<i>CAPN9</i>	Calpain 9
<i>CASC2</i>	Cancer susceptibility 2 (non-protein coding)
<i>CASP3</i>	Caspase 3
<i>CASP7</i>	Caspase 7
<i>CASP8</i>	Caspase 8
<i>CAT</i>	Catalase
<i>CAV1</i>	Caveolin 1
<i>CCDC54</i>	Coiled-coil domain containing 54
<i>CCL2</i>	C-C motif chemokine ligand 2
<i>CCL20</i>	C-C motif chemokine ligand 20
<i>CCL28</i>	C-C motif chemokine ligand 28
<i>CCNA2</i>	Cyclin A2
<i>CCNB1</i>	Cyclin B1
<i>CCND1</i>	Cyclin D1
<i>CCND3</i>	Cyclin D3

Table SIV. Continued.

Gene	Gene name
<i>CCNE1</i>	Cyclin E1
<i>CCR6</i>	C-C motif chemokine receptor 6
<i>CCR7</i>	C-C motif chemokine receptor 7
<i>CD163</i>	CD163 molecule
<i>CD24</i>	CD24 molecule
<i>CD274</i>	CD274 molecule
<i>CD38</i>	CD38 molecule
<i>CD44</i>	CD44 molecule (Indian blood group)
<i>CD68</i>	CD68 molecule
<i>CD82</i>	CD82 molecule
<i>CD9</i>	CD9 molecule
<i>CDC25B</i>	Cell division cycle 25B
<i>CDC25C</i>	Cell division cycle 25C
<i>CDC42SE2</i>	CDC42 small effector 2
<i>CDH1</i>	Cadherin 1
<i>CDH13</i>	Cadherin 13
<i>CDK2</i>	Cyclin dependent kinase 2
<i>CDK4</i>	Cyclin dependent kinase 4
<i>CDK6</i>	Cyclin dependent kinase 6
<i>CDK8</i>	Cyclin dependent kinase 8
<i>CDKN1A</i>	Cyclin dependent kinase inhibitor 1A
<i>CDKN1B</i>	Cyclin dependent kinase inhibitor 1B
<i>CDKN1C</i>	Cyclin dependent kinase inhibitor 1C
<i>CDKN2A</i>	Cyclin dependent kinase inhibitor 2A
<i>CDKN2B</i>	Cyclin dependent kinase inhibitor 2B
<i>CDKN2B-AS1</i>	CDKN2B antisense RNA 1
<i>CDX2</i>	Caudal type homeobox 2
<i>CEACAM1</i>	Carcinoembryonic antigen related cell adhesion molecule 1
<i>CEACAM3</i>	Carcinoembryonic antigen related cell adhesion molecule 3
<i>CEACAM5</i>	Carcinoembryonic antigen related cell adhesion molecule 5
<i>CEACAM7</i>	Carcinoembryonic antigen related cell adhesion molecule 7
<i>CELP</i>	Carboxyl ester lipase pseudogene
<i>CFLAR</i>	CASP8 and FADD like apoptosis regulator
<i>CGA</i>	Glycoprotein hormones, alpha polypeptide
<i>CGB3</i>	Chorionic gonadotropin beta subunit 3
<i>CGB5</i>	Chorionic gonadotropin beta subunit 5
<i>CGB8</i>	Chorionic gonadotropin beta subunit 8
<i>CGRRF1</i>	Cell growth regulator with ring finger domain 1
<i>CHD4</i>	Chromodomain helicase DNA binding protein 4
<i>CHEK1</i>	Checkpoint kinase 1
<i>CHEK2</i>	Checkpoint kinase 2
<i>CHFR</i>	Checkpoint with forkhead and ring finger domains
<i>CHST3</i>	Carbohydrate sulfotransferase 3
<i>CIB1</i>	Calcium and integrin binding 1
<i>CIDEA</i>	Cell death-inducing DFFA-like effector a
<i>CIRBP</i>	Cold inducible RNA binding protein
<i>CLDN1</i>	Claudin 1
<i>CLDN3</i>	Claudin 3
<i>CLDN4</i>	Claudin 4
<i>CLDN7</i>	Claudin 7
<i>CLU</i>	Clusterin
<i>COL11A2</i>	Collagen type XI alpha 2 chain

Table SIV. Continued.

Gene	Gene name
<i>COMMD3-</i>	COMMD3-BMI1 readthrough
<i>BMI1</i>	
<i>COMT</i>	Catechol-O-methyltransferase
<i>COPZ2</i>	Coatomer protein complex subunit zeta 2
<i>COX1</i>	Cytochrome c oxidase subunit I
<i>COX2</i>	Cytochrome c oxidase subunit II
<i>COX8A</i>	Cytochrome c oxidase subunit 8A
<i>CRABP1</i>	Cellular retinoic acid binding protein 1
<i>CREBBP</i>	CREB binding protein
<i>CRH</i>	Corticotropin releasing hormone
<i>CRISP2</i>	Cysteine rich secretory protein 2
<i>CRP</i>	C-reactive protein
<i>CRY1</i>	Cryptochrome circadian clock 1
<i>CSF1</i>	Colony stimulating factor 1
<i>CSF1R</i>	Colony stimulating factor 1 receptor
<i>CSF2</i>	Colony stimulating factor 2
<i>CSNK2B</i>	Casein kinase 2 beta
<i>CTBP2</i>	C-terminal binding protein 2
<i>CTCF</i>	CCCTC-binding factor
<i>CTCF-L</i>	CCCTC-binding factor like
<i>CTNNB1</i>	Catenin beta 1
<i>CTNNBIP1</i>	Catenin beta interacting protein 1
<i>CTNND1</i>	Catenin delta 1
<i>CTSD</i>	Cathepsin D
<i>CXADR</i>	Coxsackie virus and adenovirus receptor
<i>CXCL1</i>	C-X-C motif chemokine ligand 1
<i>CXCL10</i>	C-X-C motif chemokine ligand 10
<i>CXCL11</i>	C-X-C motif chemokine ligand 11
<i>CXCL12</i>	C-X-C motif chemokine ligand 12
<i>CXCL2</i>	C-X-C motif chemokine ligand 2
<i>CXCL8</i>	C-X-C motif chemokine ligand 8
<i>CXCR1</i>	C-X-C motif chemokine receptor 1
<i>CXCR2</i>	C-X-C motif chemokine receptor 2
<i>CXCR4</i>	C-X-C motif chemokine receptor 4
<i>CXorf67</i>	Chromosome X open reading frame 67
<i>CYP11A1</i>	Cytochrome P450 family 11 subfamily A member 1
<i>CYP17A1</i>	Cytochrome P450 family 17 subfamily A member 1
<i>CYP19A1</i>	Cytochrome P450 family 19 subfamily A member 1
<i>CYP1A1</i>	Cytochrome P450 family 1 subfamily A member 1
<i>CYP1A2</i>	Cytochrome P450 family 1 subfamily A member 2
<i>CYP1B1</i>	Cytochrome P450 family 1 subfamily B member 1
<i>CYP2B6</i>	Cytochrome P450 family 2 subfamily B member 6
<i>CYP3A4</i>	Cytochrome P450 family 3 subfamily A member 4
<i>CYP3A7</i>	Cytochrome P450 family 3 subfamily A member 7
<i>CYP4F3</i>	Cytochrome P450 family 4 subfamily F member 3
<i>CYR61</i>	Cysteine rich angiogenic inducer 61
<i>DAB1</i>	DAB1, reelin adaptor protein
<i>DAB2</i>	DAB2, clathrin adaptor protein
<i>DACH1</i>	Dachshund family transcription factor 1

Table SIV. Continued.

Gene	Gene name
<i>DAP</i>	Death associated protein
<i>DAPK1</i>	Death associated protein kinase 1
<i>DCC</i>	DCC netrin 1 receptor
<i>DCN</i>	Decorin
<i>DCTN4</i>	Dynactin subunit 4
<i>DCTN6</i>	Dynactin subunit 6
<i>DDIT3</i>	DNA damage inducible transcript 3
<i>DDR1</i>	Discoidin domain receptor tyrosine kinase 1
<i>DDT</i>	D-dopachrome tautomerase
<i>DDX3X</i>	DEAD-box helicase 3, X-linked
<i>DDX53</i>	DEAD-box helicase 53
<i>DENND1A</i>	DENN domain containing 1A
<i>DES</i>	Desmin
<i>DGKA</i>	Diacylglycerol kinase alpha
<i>DICER1</i>	Dicer 1, ribonuclease III
<i>DKK3</i>	Dickkopf WNT signaling pathway inhibitor 3
<i>DLL1</i>	Delta like canonical Notch ligand 1
<i>DNMT1</i>	DNA methyltransferase 1
<i>DNMT3B</i>	DNA methyltransferase 3 beta
<i>DROSHA</i>	Drosha ribonuclease III
<i>DUSP6</i>	Dual specificity phosphatase 6
<i>DYNLL2</i>	Dynein light chain LC8-type 2
<i>EBAG9</i>	Estrogen receptor binding site associated, antigen, 9
<i>EDN1</i>	Endothelin 1
<i>EDNRB</i>	Endothelin receptor type B
<i>EEC1</i>	Ectrodactyly, ectodermal dysplasia and cleft lip/palate syndrome 1
<i>EFEMP1</i>	EGF containing fibulin like extracellular matrix protein 1
<i>EFNA2</i>	Ephrin A2
<i>EGF</i>	Epidermal growth factor
<i>EGFR</i>	Epidermal growth factor receptor
<i>EGLN1</i>	Egl-9 family hypoxia inducible factor 1
<i>EGR1</i>	Early growth response 1
<i>EIF4E</i>	Eukaryotic translation initiation factor 4E
<i>EIF4EBP1</i>	Eukaryotic translation initiation factor 4E binding protein 1
<i>ELAVL2</i>	ELAV like RNA binding protein 2
<i>ELF1</i>	E74 like ETS transcription factor 1
<i>ELOF1</i>	Elongation factor 1 homolog
<i>EMP2</i>	Epithelial membrane protein 2
<i>ENG</i>	Endoglin
<i>ENO1</i>	Enolase 1
<i>ENOSF1</i>	Enolase superfamily member 1
<i>ENTPD1</i>	Ectonucleoside triphosphate diphosphohydrolase 1
<i>EP300</i>	E1A binding protein p300
<i>EPC1</i>	Enhancer of polycomb homolog 1
<i>EPCAM</i>	Epithelial cell adhesion molecule
<i>EPHA2</i>	EPH receptor A2
<i>EPHA8</i>	EPH receptor A8
<i>EPHB2</i>	EPH receptor B2
<i>EPHB4</i>	EPH receptor B4
<i>EPO</i>	Erythropoietin
<i>EPOR</i>	Erythropoietin receptor
<i>ERAP1</i>	Endoplasmic reticulum aminopeptidase 1
<i>ERBB2</i>	Erb-b2 receptor tyrosine kinase 2
<i>ERBB3</i>	Erb-b2 receptor tyrosine kinase 3

Table SIV. Continued.

Gene	Gene name
<i>ERCC1</i>	ERCC excision repair 1, endonuclease non-catalytic subunit
<i>ERCC2</i>	ERCC excision repair 2, TFIIH core complex helicase subunit
<i>ERCC4</i>	ERCC excision repair 4, endonuclease catalytic subunit
<i>ERCC5</i>	ERCC excision repair 5, endonuclease
<i>ERRF1</i>	ERBB receptor feedback inhibitor 1
<i>ERV3-1</i>	Endogenous retrovirus group 3 member 1
<i>ERVK-18</i>	Endogenous retrovirus group K member 18
<i>ERVK-20</i>	Endogenous retrovirus group K member 20
<i>ERVV-2</i>	Endogenous retrovirus group V member 2
<i>ERVW-1</i>	Endogenous retrovirus group W member 1
<i>ESR1</i>	Estrogen receptor 1
<i>ESR2</i>	Estrogen receptor 2
<i>ESRRA</i>	Estrogen related receptor alpha
<i>ESRRB</i>	Estrogen related receptor beta
<i>ETS1</i>	ETS proto-oncogene 1, transcription factor
<i>ETV5</i>	ETS variant 5
<i>EZH2</i>	Enhancer of zeste 2 polycomb repressive complex 2 subunit
<i>EZR</i>	Ezrin
<i>F2R</i>	Coagulation factor II thrombin receptor
<i>F2RL1</i>	F2R like trypsin receptor 1
<i>F2RL3</i>	F2R like thrombin/trypsin receptor 3
<i>FABP5</i>	Fatty acid binding protein 5
<i>FANCD2</i>	Fanconi anemia complementation group D2
<i>FAS</i>	Fas cell surface death receptor
<i>FAS-AS1</i>	FAS antisense RNA 1
<i>FASLG</i>	Fas ligand
<i>FASN</i>	Fatty acid synthase
<i>FBXW7</i>	F-box and WD repeat domain containing 7
<i>FEN1</i>	Flap structure-specific endonuclease 1
<i>FES</i>	FES proto-oncogene, tyrosine kinase
<i>FGF1</i>	Fibroblast growth factor 1
<i>FGF10</i>	Fibroblast growth factor 10
<i>FGF13</i>	Fibroblast growth factor 13
<i>FGF2</i>	Fibroblast growth factor 2
<i>FGF3</i>	Fibroblast growth factor 3
<i>FGF4</i>	Fibroblast growth factor 4
<i>FGF7</i>	Fibroblast growth factor 7
<i>FGF9</i>	Fibroblast growth factor 9
<i>FGFR2</i>	Fibroblast growth factor receptor 2
<i>FGFR4</i>	Fibroblast growth factor receptor 4
<i>FHIT</i>	Fragile histidine triad
<i>FLT4</i>	Fms related tyrosine kinase 4
<i>FOS</i>	Fos proto-oncogene, AP-1 transcription factor subunit
<i>FOSL2</i>	FOS like 2, AP-1 transcription factor subunit
<i>FOXA1</i>	Forkhead box A1
<i>FOXC1</i>	Forkhead box C1
<i>FOXD3</i>	Forkhead box D3
<i>FOXO1</i>	Forkhead box O1
<i>FOXP3</i>	Forkhead box P3
<i>FSD1</i>	Fibronectin type III and SPRY domain containing 1
<i>FSD1L</i>	Fibronectin type III and SPRY domain containing 1 like
<i>FST</i>	Follistatin

Table SIV. Continued.

Gene	Gene name
<i>FSTL1</i>	Follistatin like 1
<i>FTO</i>	FTO, alpha-ketoglutarate dependent dioxygenase
<i>FUT4</i>	Fucosyltransferase 4
<i>GABPA</i>	GA binding protein transcription factor alpha subunit
<i>GAS5</i>	Growth arrest specific 5 (non-protein coding)
<i>GAS6</i>	Growth arrest specific 6
<i>GATA4</i>	GATA binding protein 4
<i>GGN</i>	Gametogenetin
<i>GGT1</i>	Gamma-glutamyltransferase 1
<i>GGT2</i>	Gamma-glutamyltransferase 2
<i>GGTLC3</i>	Gamma-glutamyltransferase light chain 3
<i>GGTLC4P</i>	Gamma-glutamyltransferase light chain 4 pseudogene
<i>GGTLC5P</i>	Gamma-glutamyltransferase light chain 5 pseudogene
<i>GHI</i>	Growth hormone 1
<i>GHRH</i>	Growth hormone releasing hormone
<i>GHRHR</i>	Growth hormone releasing hormone receptor
<i>GHSR</i>	Growth hormone secretagogue receptor
<i>GJB1</i>	Gap junction protein beta 1
<i>GJB2</i>	Gap junction protein beta 2
<i>GLI1</i>	GLI family zinc finger 1
<i>GLYAT</i>	Glycine-N-acyltransferase
<i>GNRH1</i>	Gonadotropin releasing hormone 1
<i>GNRH2</i>	Gonadotropin releasing hormone 2
<i>GNRHR</i>	Gonadotropin releasing hormone receptor
<i>GORASP2</i>	Golgi reassembly stacking protein 2
<i>GPBAR1</i>	G protein-coupled bile acid receptor 1
<i>GPCPD1</i>	Glycerophosphocholine phosphodiesterase 1
<i>GPERR1</i>	G protein-coupled estrogen receptor 1
<i>GPI</i>	Glucose-6-phosphate isomerase
<i>GPRC5A</i>	G protein-coupled receptor class C group 5 member A
<i>GRP</i>	Gastrin releasing peptide
<i>GSTM1</i>	Glutathione S-transferase mu 1
<i>GSTP1</i>	Glutathione S-transferase pi 1
<i>GSTT1</i>	Glutathione S-transferase theta 1
<i>GSTZ1</i>	Glutathione S-transferase zeta 1
<i>GTF2H1</i>	General transcription factor IIH subunit 1
<i>GZMA</i>	Granzyme A
<i>H2AFX</i>	H2A histone family member X
<i>HAAO</i>	3-hydroxyanthranilate 3,4-dioxygenase
<i>HAND2</i>	Heart and neural crest derivatives expressed 2
<i>HAS1</i>	Hyaluronan synthase 1
<i>HCRT</i>	Hypocretin neuropeptide precursor
<i>HDAC1</i>	Histone deacetylase 1
<i>HDAC2</i>	Histone deacetylase 2
<i>HDAC9</i>	Histone deacetylase 9
<i>HES1</i>	Hes family bHLH transcription factor 1
<i>HFE</i>	Hemochromatosis
<i>HGF</i>	Hepatocyte growth factor
<i>HHEX</i>	Hematopoietically expressed homeobox
<i>HIF1A</i>	Hypoxia inducible factor 1 alpha subunit
<i>HMGN5</i>	High mobility group nucleosome binding domain 5
<i>HMMR</i>	Hyaluronan mediated motility receptor
<i>HNF1B</i>	HNF1 homeobox B

Table SIV. Continued.

Gene	Gene name
<i>HNF4A</i>	Hepatocyte nuclear factor 4 alpha
<i>HOTAIR</i>	HOX transcript antisense RNA
<i>HOXA10</i>	Homeobox A10
<i>HOXA11</i>	Homeobox A11
<i>HOXB13</i>	Homeobox B13
<i>HPGDS</i>	Hematopoietic prostaglandin D synthase
<i>HPR</i>	Haptoglobin-related protein
<i>HPSE</i>	Heparanase
<i>HRAS</i>	HRas proto-oncogene, GTPase
<i>HSD17B1</i>	Hydroxysteroid 17-beta dehydrogenase 1
<i>HSD17B2</i>	Hydroxysteroid 17-beta dehydrogenase 2
<i>HSD17B4</i>	Hydroxysteroid 17-beta dehydrogenase 4
<i>HSD17B6</i>	Hydroxysteroid 17-beta dehydrogenase 6
<i>HSD17B7</i>	Hydroxysteroid 17-beta dehydrogenase 7
<i>HSD3B1</i>	Hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
<i>HSD3B2</i>	Hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 2
<i>HSF1</i>	Heat shock transcription factor 1
<i>HSP90AA1</i>	Heat shock protein 90 alpha family class A member 1
<i>HSPA5</i>	Heat shock protein family A (Hsp70) member 5
<i>HSPB3</i>	Heat shock protein family B (small) member 3
<i>HSPE1</i>	Heat shock protein family E (Hsp10) member 1
<i>HTC2</i>	Hypertrichosis 2 (generalized, congenital)
<i>HTR1B</i>	5-hydroxytryptamine receptor 1B
<i>HTRA1</i>	HtrA serine peptidase 1
<i>HTRA2</i>	HtrA serine peptidase 2
<i>HTRA3</i>	HtrA serine peptidase 3
<i>HYAL1</i>	Hyaluronoglucosaminidase 1
<i>HYAL2</i>	Hyaluronoglucosaminidase 2
<i>HYAL3</i>	Hyaluronoglucosaminidase 3
<i>IFI27</i>	Interferon alpha inducible protein 27
<i>IFITM1</i>	Interferon induced transmembrane protein 1
<i>IFNB1</i>	Interferon beta 1
<i>IFNG</i>	Interferon gamma
<i>IGF1</i>	Insulin like growth factor 1
<i>IGF1R</i>	Insulin like growth factor 1 receptor
<i>IGF2</i>	Insulin like growth factor 2
<i>IGF2BP3</i>	Insulin like growth factor 2 mRNA Binding protein 3
<i>IGF2R</i>	Insulin like growth factor 2 receptor
<i>IGFBP1</i>	Insulin like growth factor binding protein 1
<i>IGFBP2</i>	Insulin like growth factor binding protein 2
<i>IGFBP3</i>	Insulin like growth factor binding protein 3
<i>IGFBP5</i>	Insulin like growth factor binding protein 5
<i>IGFBP6</i>	Insulin like growth factor binding protein 6
<i>IGFBP7</i>	Insulin like growth factor binding protein 7
<i>IL11</i>	Interleukin 11
<i>IL13</i>	Interleukin 13
<i>IL17A</i>	Interleukin 17A
<i>IL1A</i>	Interleukin 1 alpha
<i>IL1B</i>	Interleukin 1 beta
<i>IL1RN</i>	Interleukin 1 receptor antagonist
<i>IL32</i>	Interleukin 32
<i>IL6</i>	Interleukin 6

Table SIV. Continued.

Gene	Gene name
<i>IL6R</i>	Interleukin 6 receptor
<i>IL6ST</i>	Interleukin 6 signal transducer
<i>INHA</i>	Inhibin alpha subunit
<i>INHBA</i>	Inhibin beta A subunit
<i>INHBB</i>	Inhibin beta B subunit
<i>INHBE</i>	Inhibin beta E subunit
<i>INSR</i>	Insulin receptor
<i>INTS2</i>	Integrator complex subunit 2
<i>IPO8</i>	Importin 8
<i>IRS1</i>	Insulin receptor substrate 1
<i>IRS2</i>	Insulin receptor substrate 2
<i>ITGA4</i>	Integrin subunit alpha 4
<i>ITGB1</i>	Integrin subunit beta 1
<i>ITK</i>	IL2 inducible T-cell kinase
<i>JAG1</i>	Jagged 1
<i>JAK1</i>	Janus kinase 1
<i>JAZF1</i>	JAZF zinc finger 1
<i>JPH4</i>	Junctophilin 4
<i>JUN</i>	Jun proto-oncogene, AP-1 transcription factor subunit
<i>JUP</i>	Junction plakoglobin
<i>KCNH2</i>	Potassium voltage-gated channel subfamily H member 2
<i>KCNH6</i>	Potassium voltage-gated channel subfamily H member 6
<i>KCNMA1</i>	Potassium calcium-activated channel subfamily M alpha 1
<i>KCNN4</i>	Potassium calcium-activated channel subfamily N member 4
<i>KDM4A</i>	Lysine demethylase 4A
<i>KDM4B</i>	Lysine demethylase 4B
<i>KDR</i>	Kinase insert domain receptor
<i>KHDRBS1</i>	KH RNA binding domain containing, signal transduction associated 1
<i>KIAA1324</i>	KIAA1324
<i>KISS1</i>	KiSS-1 metastasis-suppressor
<i>KISS1R</i>	KISS1 receptor
<i>KIT</i>	KIT proto-oncogene receptor tyrosine kinase
<i>KITLG</i>	KIT ligand
<i>KLF9</i>	Kruppel like factor 9
<i>KLK4</i>	Kallikrein related peptidase 4
<i>KLK8</i>	Kallikrein related peptidase 8
<i>LLN</i>	Killin, p53-regulated DNA replication inhibitor
<i>KRAS</i>	KRAS proto-oncogene, GTPase
<i>KRT19</i>	Keratin 19
<i>KRT20</i>	Keratin 20
<i>LICAM</i>	L1 cell adhesion molecule
<i>LAMC1</i>	Laminin subunit gamma 1
<i>LBX1</i>	Ladybird homeobox 1
<i>LCN2</i>	Lipocalin 2
<i>LEF1</i>	Lymphoid enhancer binding factor 1
<i>LEP</i>	Leptin
<i>LEPR</i>	Leptin receptor
<i>LGR6</i>	Leucine rich repeat containing G protein-coupled receptor 6
<i>LHCGR</i>	Luteinizing hormone/choriogonadotropin receptor
<i>LIF</i>	Leukemia inhibitory factor

Table SIV. Continued.

Gene	Gene name
<i>LINC-ROR</i>	Long intergenic non-protein coding RNA, regulator of reprogramming
<i>LLGL1</i>	LLGL1, scribble cell polarity complex component
<i>LNPEP</i>	Leucyl and cystinyl aminopeptidase
<i>LOC100128922</i>	Connexin
<i>LOC102724023</i>	ES1 protein homolog, mitochondrial
<i>LPAR2</i>	Lysophosphatidic acid receptor 2
<i>LPP</i>	LIM domain containing preferred translocation partner in lipoma
<i>LPXN</i>	Leupaxin
<i>LRG1</i>	Leucine rich alpha-2-glycoprotein 1
<i>LRP1</i>	LDL receptor related protein 1
<i>LRPPRC</i>	Leucine rich pentatricopeptide repeat containing
<i>LTA</i>	Lymphotoxin alpha
<i>LTF</i>	Lactotransferrin
<i>LXN</i>	Latexin
<i>MACROD1</i>	MACRO domain containing 1
<i>MAL</i>	Mal, T-cell differentiation protein
<i>MALAT1</i>	Metastasis associated lung adenocarcinoma transcript 1 (non-protein coding)
<i>MAP2K7</i>	Mitogen-activated protein kinase kinase 7
<i>MAP3K1</i>	Mitogen-activated protein kinase kinase kinase 1
<i>MAP3K4</i>	Mitogen-activated protein kinase kinase kinase 4
<i>MAP3K8</i>	Mitogen-activated protein kinase kinase kinase 8
<i>MAPK1</i>	Mitogen-activated protein kinase 1
<i>MAPK3</i>	Mitogen-activated protein kinase 3
<i>MARCH8</i>	Membrane associated ring-CH-type finger 8
<i>MARCKSL1</i>	MARCKS like 1
<i>MBD2</i>	Methyl-CpG binding domain protein 2
<i>MBTD1</i>	Mbt domain containing 1
<i>MC4R</i>	Melanocortin 4 receptor
<i>MCL1</i>	BCL2 family apoptosis regulator
<i>MDK</i>	Midkine (neurite growth-promoting factor 2)
<i>MDM2</i>	MDM2 proto-oncogene
<i>MDM4</i>	MDM4, p53 regulator
<i>MEAF6</i>	MYST/Esa1 associated factor 6
<i>MECOM</i>	MDS1 and EVI1 complex locus
<i>MECP2</i>	Methyl-CpG binding protein 2
<i>MED15</i>	Mediator complex subunit 15
<i>MET</i>	MET proto-oncogene, receptor tyrosine kinase
<i>MGMT</i>	O-6-methylguanine-DNA methyltransferase
<i>MIG7</i>	Mig-7
<i>MIR100</i>	MicroRNA 100
<i>MIR106B</i>	MicroRNA 106b
<i>MIR124-2</i>	MicroRNA 124-2
<i>MIR129-2</i>	MicroRNA 129-2
<i>MIR130B</i>	MicroRNA 130b
<i>MIR134</i>	MicroRNA 134
<i>MIR143</i>	MicroRNA 143
<i>MIR145</i>	MicroRNA 145
<i>MIR148A</i>	MicroRNA 148a
<i>MIR152</i>	MicroRNA 152
<i>MIR155</i>	MicroRNA 155

Table SIV. Continued.

Gene	Gene name
<i>MIR181A2</i>	MicroRNA 181a-2
<i>MIR182</i>	MicroRNA 182
<i>MIR193A</i>	MicroRNA 193a
<i>MIR199B</i>	MicroRNA 199b
<i>MIR200B</i>	MicroRNA 200b
<i>MIR200C</i>	MicroRNA 200c
<i>MIR203A</i>	MicroRNA 203a
<i>MIR204</i>	MicroRNA 204
<i>MIR205</i>	MicroRNA 205
<i>MIR206</i>	MicroRNA 206
<i>MIR214</i>	MicroRNA 214
<i>MIR222</i>	MicroRNA 222
<i>MIR26A1</i>	MicroRNA 26a-1
<i>MIR27A</i>	MicroRNA 27a
<i>MIR31</i>	MicroRNA 31
<i>MIR337</i>	MicroRNA 337
<i>MIR34A</i>	MicroRNA 34a
<i>MIR34B</i>	MicroRNA 34b
<i>MIR34C</i>	MicroRNA 34c
<i>MIR372</i>	MicroRNA 372
<i>MIR490</i>	MicroRNA 490
<i>MIR503</i>	MicroRNA 503
<i>MIR505</i>	MicroRNA 505
<i>MIR618</i>	MicroRNA 618
<i>MIR98</i>	MicroRNA 98
<i>MIR99A</i>	MicroRNA 99a
<i>MLH1</i>	MutL homolog 1
<i>MLH3</i>	MutL homolog 3
<i>MME</i>	Membrane metalloendopeptidase
<i>MMP1</i>	Matrix metallopeptidase 1
<i>MMP13</i>	Matrix metallopeptidase 13
<i>MMP14</i>	Matrix metallopeptidase 14
<i>MMP2</i>	Matrix metallopeptidase 2
<i>MMP26</i>	Matrix metallopeptidase 26
<i>MMP3</i>	Matrix metallopeptidase 3
<i>MMP7</i>	Matrix metallopeptidase 7
<i>MMP9</i>	Matrix metallopeptidase 9
<i>MRC1</i>	Mannose receptor C-type 1
<i>MRE11</i>	MRE11 homolog, double strand break repair nuclease
<i>MRPL19</i>	Mitochondrial ribosomal protein L19
<i>MRPL28</i>	Mitochondrial ribosomal protein L28
<i>MSH2</i>	MutS homolog 2
<i>MSH3</i>	MutS homolog 3
<i>MSH6</i>	MutS homolog 6
<i>MSH1</i>	Musashi RNA binding protein 1
<i>MSMB</i>	Microseminoprotein beta
<i>MSN</i>	Moesin
<i>MSR1</i>	Macrophage scavenger receptor 1
<i>MST1</i>	Macrophage stimulating 1
<i>MT1E</i>	Metallothionein 1E
<i>MTA1</i>	Metastasis associated 1
<i>MTDH</i>	Metadherin
<i>MTHFR</i>	Methylenetetrahydrofolate reductase
<i>MTOR</i>	Mechanistic target of rapamycin
<i>MUC1</i>	Mucin 1, cell surface associated
<i>MUC16</i>	Mucin 16, cell surface associated
<i>MUC20</i>	Mucin 20, cell surface associated
<i>MUC4</i>	Mucin 4, cell surface associated

Table SIV. Continued.

Gene	Gene name
<i>MUL1</i>	Mitochondrial E3 ubiquitin protein ligase 1
<i>MUTYH</i>	MutY DNA glycosylase
<i>MVP</i>	Major vault protein
<i>MYBL2</i>	MYB proto-oncogene like 2
<i>MYC</i>	V-myc avian myelocytomatosis viral oncogene homolog
<i>NBN</i>	Nibrin
<i>NBR1</i>	NBR1, autophagy cargo receptor
<i>NCOA1</i>	Nuclear receptor coactivator 1
<i>NCOA2</i>	Nuclear receptor coactivator 2
<i>NCOA3</i>	Nuclear receptor coactivator 3
<i>ND1</i>	NADH dehydrogenase, subunit 1 (complex I)
<i>ND3</i>	NADH dehydrogenase, subunit 3 (complex I)
<i>NDC80</i>	NDC80, kinetochore complex component
<i>NDRG1</i>	N-myc downstream regulated 1
<i>NEDD4</i>	Neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase
<i>NES</i>	Nestin
<i>NEU1</i>	Neuraminidase 1
<i>NEURL1</i>	Neuralized E3 ubiquitin protein ligase 1
<i>NFE2L2</i>	Nuclear factor, erythroid 2 like 2
<i>NFKB1</i>	Nuclear factor kappa B subunit 1
<i>NID1</i>	Nidogen 1
<i>NM</i>	Neutrophil migration
<i>NME1</i>	NME/NM23 nucleoside diphosphate kinase 1
<i>NOD1</i>	Nucleotide binding oligomerization containing 1
<i>NOD2</i>	Nucleotide binding oligomerization domain containing 2
<i>NOS3</i>	Nitric oxide synthase 3
<i>NOTCH1</i>	Notch 1
<i>NOTCH4</i>	Notch 4
<i>NOV</i>	Nephroblastoma overexpressed
<i>NPM1</i>	Nucleophosmin
<i>NR0B1</i>	Nuclear receptor subfamily 0 group B member 1
<i>NR0B2</i>	Nuclear receptor subfamily 0 group B member 2
<i>NR1H2</i>	Nuclear receptor subfamily 1 group H member 2
<i>NR1I2</i>	Nuclear receptor subfamily 1 group I member 2
<i>NR5A1</i>	Nuclear receptor subfamily 5 group A member 1
<i>NR5A2</i>	Nuclear receptor subfamily 5 group A member 2
<i>NRIP1</i>	Nuclear receptor interacting protein 1
<i>NT5E</i>	5'-nucleotidase ecto
<i>NTN1</i>	Netrin 1
<i>NTRK2</i>	Neurotrophic receptor tyrosine kinase 2
<i>NUP62</i>	Nucleoporin 62
<i>NUPR1</i>	Nuclear protein 1, transcriptional regulator
<i>NUTM2A</i>	NUT family member 2A
<i>NUTM2B</i>	NUT family member 2B
<i>NXT1</i>	Nuclear transport factor 2 like export factor 1

Table SIV. Continued.

Gene	Gene name
<i>OGG1</i>	8-oxoguanine DNA glycosylase
<i>OLFM4</i>	Olfactomedin 4
<i>OPN1LW</i>	Opsin 1, long wave sensitive
<i>OTUB1</i>	OTU deubiquitinase, ubiquitin aldehyde binding 1
<i>OVGP1</i>	Oviductal glycoprotein 1
<i>P2RY2</i>	Purinergic receptor P2Y2
<i>PAEP</i>	Progesterone associated endometrial protein
<i>PAG1</i>	Phosphoprotein membrane anchor with glycosphingolipid microdomains 1
<i>PAK1</i>	p21 (RAC1) activated kinase 1
<i>PAK3</i>	p21 (RAC1) activated kinase 3
<i>PAK4</i>	p21 (RAC1) activated kinase 4
<i>PARK2</i>	Parkin RBR E3 ubiquitin protein ligase
<i>PARP1</i>	Poly(ADP-ribose) polymerase 1
<i>PAWR</i>	Pro-apoptotic WT1 regulator
<i>PAX2</i>	Paired box 2
<i>PAX8</i>	Paired box 8
<i>PCBP4</i>	Poly(rC) binding protein 4
<i>PCDH10</i>	Protocadherin 10
<i>PCLAF</i>	PCNA clamp associated factor
<i>PCNA</i>	Proliferating cell nuclear antigen
<i>PDE7A</i>	Phosphodiesterase 7A
<i>PDGFD</i>	Platelet derived growth factor D
<i>PDGFRA</i>	Platelet derived growth factor receptor alpha
<i>PDGFRB</i>	Platelet derived growth factor receptor beta
<i>PDIM1L</i>	PDLIM1 interacting kinase 1 like
<i>PELP1</i>	Proline, glutamate and leucine rich protein 1
<i>PER1</i>	Period circadian clock 1
<i>PER2</i>	Period circadian clock 2
<i>PGF</i>	Placental growth factor
<i>PGPEP1</i>	Pyroglutamyl-peptidase I
<i>PGR</i>	Progesterone receptor
<i>PGRMC1</i>	Progesterone receptor membrane component 1
<i>PHF1</i>	PHD finger protein 1
<i>PIGR</i>	Polymeric immunoglobulin receptor
<i>PIK3C2A</i>	Phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha
<i>PIK3CA</i>	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha
<i>PIK3CB</i>	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta
<i>PIK3CD</i>	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta
<i>PIK3CG</i>	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma
<i>PIK3R1</i>	Phosphoinositide-3-kinase regulatory subunit 1
<i>PIK3R2</i>	Phosphoinositide-3-kinase regulatory subunit 2
<i>PIWIL2</i>	Piwi like RNA-mediated gene silencing 2
<i>PKN1</i>	Protein kinase N1
<i>PLAT</i>	Plasminogen activator, tissue type
<i>PLAU</i>	Plasminogen activator, urokinase
<i>PLEK</i>	Pleckstrin
<i>PLG</i>	Plasminogen
<i>PLK1</i>	Polo like kinase 1
<i>PLXNA1</i>	Plexin A1

Table SIV. Continued.

Gene	Gene name
<i>PLXNA3</i>	Plexin A3
<i>PMS2</i>	PMS1 homolog 2, mismatch repair system component
<i>POLD1</i>	DNA polymerase delta 1, catalytic subunit
<i>POLE</i>	DNA polymerase epsilon, catalytic subunit
<i>POTEF</i>	POTE ankyrin domain family member F
<i>POU5F1</i>	POU class 5 homeobox 1
<i>PPARD</i>	Peroxisome proliferator activated receptor delta
<i>PPARG</i>	Peroxisome proliferator activated receptor gamma
<i>PPIA</i>	Peptidylprolyl isomerase A
<i>PPME1</i>	Protein phosphatase methylesterase 1
<i>PPP1R2P9</i>	Protein phosphatase 1 regulatory inhibitor subunit 2 pseudogene 9
<i>PPP2R1A</i>	Protein phosphatase 2 scaffold subunit Aalpha
<i>PPP4C</i>	Protein phosphatase 4 catalytic subunit
<i>PR@</i>	Proline rich protein gene cluster
<i>PRAP1</i>	Proline rich acidic protein 1
<i>PRB2</i>	Proline rich protein BstNI subfamily 2
<i>PRDM2</i>	PR/SET domain 2
<i>PRKCA</i>	Protein kinase C alpha
<i>PRKDC</i>	Protein kinase, DNA-activated, catalytic polypeptide
<i>PRL</i>	Prolactin
<i>PRMT1</i>	Protein arginine methyltransferase 1
<i>PRMT5</i>	Protein arginine methyltransferase 5
<i>PROK1</i>	Prokineticin 1
<i>PROM1</i>	Prominin 1
<i>PRSS55</i>	Protease, serine 55
<i>PSG2</i>	Pregnancy specific beta-1-glycoprotein 2
<i>PSMD10</i>	Proteasome 26S subunit, non-ATPase 10
<i>PSMD9</i>	Proteasome 26S subunit, non-ATPase 9
<i>PSME3</i>	Proteasome activator subunit 3
<i>PTEN</i>	Phosphatase and tensin homolog
<i>PTENP1</i>	Phosphatase and tensin homolog Pseudogene 1
<i>PTENP1</i>	Phosphatase and tensin homolog pseudogene 1
<i>PTGER4</i>	Prostaglandin E receptor 4
<i>PTGES2</i>	Prostaglandin E synthase 2
<i>PTGS2</i>	Prostaglandin-endoperoxide synthase 2
<i>PTPN6</i>	Protein tyrosine phosphatase, non-receptor type 6
<i>PTPRA</i>	Protein tyrosine phosphatase, receptor type A
<i>PWAR1</i>	Prader Willi/Angelman region RNA 1
<i>PWAR4</i>	Prader Willi/Angelman region RNA 4
<i>QPCT</i>	Glutamyl-peptide cyclotransferase
<i>RAB32</i>	RAB32, member RAS oncogene family
<i>RAB40B</i>	RAB40B, member RAS oncogene family
<i>RAC1</i>	Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)
<i>RAD50</i>	RAD50 double strand break repair protein
<i>RAF1</i>	Raf-1 proto-oncogene, serine/threonine kinase
<i>RARA</i>	Retinoic acid receptor alpha
<i>RARB</i>	Retinoic acid receptor beta
<i>RARRES1</i>	Retinoic acid receptor responder 1

Table SIV. Continued.

Gene	Gene name
<i>RASSF1</i>	Ras association domain family member 1
<i>RB1</i>	RB transcriptional corepressor 1
<i>RBL2</i>	RB transcriptional corepressor like 2
<i>RBMX</i>	RNA binding motif protein, X-linked
<i>RBMXP1</i>	RNA binding motif protein, X-linked pseudogene 1
<i>RBP1</i>	Retinol binding protein 1
<i>RCAN1</i>	Regulator of calcineurin 1
<i>RDH16</i>	Retinol dehydrogenase 16 (all-trans)
<i>RELB</i>	RELB proto-oncogene, NF-kB subunit
<i>RHOC</i>	Ras homolog family member C
<i>RNF43</i>	Ring finger protein 43
<i>RNR1</i>	s-rRNA
<i>RNU1-1</i>	RNA, U1 small nuclear 1
<i>RPL10</i>	Ribosomal protein L10
<i>RPL11</i>	Ribosomal protein L11
<i>RPL22</i>	Ribosomal protein L22
<i>RPL36A</i>	Ribosomal protein L36a
<i>RPS6KA6</i>	Ribosomal protein S6 kinase A6
<i>RPSA</i>	Ribosomal protein SA
<i>RUNX1</i>	Runt related transcription factor 1
<i>RUNX3</i>	Runt related transcription factor 3
<i>RXFP1</i>	Relaxin/insulin like family peptide receptor 1
<i>RXFP3</i>	Relaxin/insulin like family peptide receptor 3
<i>S100A4</i>	S100 calcium binding protein A4
<i>S100A6</i>	S100 calcium binding protein A6
<i>S100A8</i>	S100 calcium binding protein A8
<i>SAG</i>	S-antigen visual arrestin
<i>SAIL</i>	Suppression of anchorage independence 1
<i>SALL4</i>	Spalt like transcription factor 4
<i>SATB2</i>	SATB homeobox 2
<i>SCGB2A1</i>	Secretoglobin family 2A member 1
<i>SCRIB</i>	Scribbled planar cell polarity protein
<i>SDC1</i>	Syndecan 1
<i>SDHB</i>	Succinate dehydrogenase complex iron Sulfur subunit B
<i>SEMA3B</i>	Semaphorin 3B
<i>SEMA3F</i>	Semaphorin 3F
<i>SEMA6A</i>	Semaphorin 6A
<i>SERPINA6</i>	Serpin family A member 6
<i>SERPINB2</i>	Serpin family B member 2
<i>SERPINB5</i>	Serpin family B member 5
<i>SERPINE1</i>	Serpin family E member 1
<i>SERPINF2</i>	Serpin family F member 2
<i>SESN2</i>	Sestrin 2
<i>SETD2</i>	SET domain containing 2
<i>SFRP4</i>	Secreted frizzled related protein 4
<i>SGCG</i>	Sarcoglycan gamma
<i>SGSM3</i>	Small G protein signaling modulator 3
<i>SH2B3</i>	SH2B adaptor protein 3
<i>SHBG</i>	Sex hormone binding globulin
<i>SIRT1</i>	Sirtuin 1
<i>SIRT2</i>	Sirtuin 2
<i>SIRT3</i>	Sirtuin 3
<i>SIRT4</i>	Sirtuin 4
<i>SIRT5</i>	Sirtuin 5
<i>SIRT6</i>	Sirtuin 6
<i>SIRT7</i>	Sirtuin 7
<i>SKP2</i>	S-phase kinase associated protein 2

Table SIV. Continued.

Gene	Gene name
<i>SLC12A9</i>	Solute carrier family 12 member 9
<i>SLC14A2</i>	Solute carrier family 14 member 2
<i>SLC22A16</i>	Solute carrier family 22 member 16
<i>SLC22A3</i>	Solute carrier family 22 member 3
<i>SLC25A20</i>	Solute carrier family 25 member 20
<i>SLC52A2</i>	Solute carrier family 52 member 2
<i>SLC7A10</i>	Solute carrier family 7 member 10
<i>SLPI</i>	Secretory leukocyte peptidase inhibitor
<i>SMAD2</i>	SMAD family member 2
<i>SMAD4</i>	SMAD family member 4
<i>SMAD7</i>	SMAD family member 7
<i>SMARCA1</i>	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1
<i>SMARCE1</i>	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1
<i>SMUG1</i>	Single-strand-selective monofunctional uracil-DNA glycosylase 1
<i>SNAI1</i>	Snail family transcriptional repressor 1
<i>SNCG</i>	Synuclein gamma
<i>SNHG12</i>	Small nucleolar RNA host gene 12
<i>SOAT1</i>	Sterol O-acyltransferase 1
<i>SOCS2</i>	Suppressor of cytokine signaling 2
<i>SOCS3</i>	Suppressor of cytokine signaling 3
<i>SOX1</i>	SRY-box 1
<i>SOX4</i>	SRY-box 4
<i>SOX7</i>	SRY-box 7
<i>SOX9</i>	SRY-box 9
<i>SP1</i>	Sp1 transcription factor
<i>SPA17</i>	Sperm autoantigenic protein 17
<i>SPAM1</i>	Sperm adhesion molecule 1
<i>SPARC</i>	Secreted protein acidic and cysteine rich
<i>SPOP</i>	Speckle type BTB/POZ protein
<i>SPP1</i>	Secreted phosphoprotein 1
<i>SPZI</i>	Spermatogenic leucine zipper 1
<i>SQSTM1</i>	Sequestosome 1
<i>SRA1</i>	Steroid receptor RNA activator 1
<i>SRC</i>	SRC proto-oncogene, non-receptor tyrosine kinase
<i>SRD5A2</i>	Steroid 5 alpha-reductase 2
<i>SREBF1</i>	Sterol regulatory element binding transcription factor 1
<i>SRSF10</i>	Serine and arginine rich splicing factor 10
<i>SSSCA1</i>	Sjogren syndrome/scleroderma autoantigen 1
<i>SST</i>	Somatostatin
<i>ST6GALNAC1</i>	ST6 N-acetylgalactosaminide alpha-2,6-sialyltransferase 1
<i>STAR</i>	Steroidogenic acute regulatory protein
<i>STARD13</i>	StAR related lipid transfer domain containing 13
<i>STAT3</i>	Signal transducer and activator of transcription 3
<i>STC1</i>	Stanniocalcin 1
<i>STK11</i>	Serine/threonine kinase 11
<i>STMN1</i>	Stathmin 1
<i>STOML2</i>	Stomatin like 2
<i>STS</i>	Steroid sulfatase

Table SIV. Continued.

Gene	Gene name
<i>SUB1</i>	SUB1 homolog, transcriptional regulator
<i>SULT1A1</i>	Sulfotransferase family 1A member 1
<i>SULT1E1</i>	Sulfotransferase family 1E member 1
<i>SULT2A1</i>	Sulfotransferase family 2A member 1
<i>SULT2B1</i>	Sulfotransferase family 2B member 1
<i>SUMO1</i>	Small ubiquitin-like modifier 1
<i>SUZ12</i>	SUZ12 polycomb repressive complex 2 subunit
<i>SYTL2</i>	Synaptotagmin like 2
<i>TAM</i>	Myeloproliferative syndrome, transient (transient abnormal
<i>TBC1D9</i>	TBC1 domain family member 9
<i>TBX1</i>	T-box 1
<i>TCEAL7</i>	Transcription elongation factor A like 7
<i>TCF4</i>	Transcription factor 4
<i>TCF7L2</i>	Transcription factor 7 like 2
<i>TCHP</i>	Trichoplein keratin filament binding
<i>TEAD4</i>	TEA domain transcription factor 4
<i>TERC</i>	Telomerase RNA component
<i>TERF2</i>	Telomeric repeat binding factor 2
<i>TERT</i>	Telomerase reverse transcriptase
<i>TET2</i>	Tet methylcytosine dioxygenase 2
<i>TFAP2C</i>	Transcription factor AP-2 gamma
<i>TFF3</i>	Trefoil factor 3
<i>TGFA</i>	Transforming growth factor alpha
<i>TGFB1</i>	Transforming growth factor beta 1
<i>TGFB2</i>	Transforming growth factor beta 2
<i>TGFB3</i>	Transforming growth factor beta 3
<i>TGFBFR1</i>	Transforming growth factor beta receptor 1
<i>TGFBFR2</i>	Transforming growth factor beta receptor 2
<i>THADA</i>	THADA, armadillo repeat containing
<i>THBS1</i>	Thrombospondin 1
<i>THBS2</i>	Thrombospondin 2
<i>THEMIS2</i>	Thymocyte selection associated family member 2
<i>THUMPD1</i>	THUMP domain containing 1
<i>TICAM2</i>	Toll like receptor adaptor molecule 2
<i>TIMP1</i>	TIMP metalloproteinase inhibitor 1
<i>TIMP2</i>	TIMP metalloproteinase inhibitor 2
<i>TIMP3</i>	TIMP metalloproteinase inhibitor 3
<i>TLR1</i>	Toll like receptor 1
<i>TLR2</i>	Toll like receptor 2
<i>TLR3</i>	Toll like receptor 3
<i>TLR4</i>	Toll like receptor 4
<i>TLR9</i>	Toll like receptor 9
<i>TMED7</i>	Transmembrane p24 trafficking protein 7
<i>TMED7-TICAM2</i>	TMED7-TICAM2 readthrough
<i>TICAM2</i>	
<i>TMEM54</i>	Transmembrane protein 54
<i>TNF</i>	Tumor necrosis factor
<i>TNFRSF10C</i>	TNF receptor superfamily member 10c
<i>TNFRSF11A</i>	TNF receptor superfamily member 11a
<i>TNFRSF12A</i>	TNF receptor superfamily member 12A
<i>TNFSF10</i>	Tumor necrosis factor superfamily member 10
<i>TNFSF11</i>	Tumor necrosis factor superfamily member 11
<i>TNFSF12</i>	Tumor necrosis factor superfamily member 12

Table SIV. Continued.

Gene	Gene name
<i>TNFSF12-</i>	TNFSF12-TNFSF13 readthrough
<i>TNFSF13</i>	
<i>TNK2</i>	Tyrosine kinase non receptor 2
<i>TNKS2</i>	Tankyrase 2
<i>TOX4</i>	TOX high mobility group box family member 4
<i>TP53</i>	Tumor protein p53
<i>TP73</i>	Tumor protein p73
<i>TRAM1</i>	Translocation associated membrane protein 1
<i>TRIM22</i>	Tripartite motif containing 22
<i>TRIM25</i>	Tripartite motif containing 25
<i>TRIM27</i>	Tripartite motif containing 27
<i>TRNL1</i>	TRNA
<i>TSC1</i>	Tuberous sclerosis 1
<i>TSC2</i>	Tuberous sclerosis 2
<i>TSHZ1</i>	Teashirt zinc finger homeobox 1
<i>TSNAX</i>	Translin associated factor X
<i>TSPYL2</i>	TSPY like 2
<i>TUBA1B</i>	Tubulin alpha 1b
<i>TWIST1</i>	Twist family bHLH transcription factor 1
<i>TYMP</i>	Thymidine phosphorylase
<i>TYMS</i>	Thymidylate synthetase
<i>UBE2N</i>	Ubiquitin conjugating enzyme E2 N
<i>UCN</i>	Urocortin
<i>UCP2</i>	Uncoupling protein 2
<i>UGT1A1</i>	UDP glucuronosyltransferase family 1 member A1
<i>UGT2B17</i>	UDP glucuronosyltransferase family 2 member B17
<i>UGT2B7</i>	UDP glucuronosyltransferase family 2 member B7
<i>UHRF1</i>	Ubiquitin like with PHD and ring finger domains 1
<i>UTS2R</i>	Urotensin 2 receptor
<i>VCAN</i>	Versican
<i>VEGFA</i>	Vascular endothelial growth factor A
<i>VEGFB</i>	Vascular endothelial growth factor B
<i>VIM</i>	Vimentin
<i>VPS51</i>	VPS51, GARP complex subunit
<i>WDTC1</i>	WD and tetratricopeptide repeats 1
<i>WFDC2</i>	WAP four-disulfide core domain 2
<i>WLS</i>	Wntless Wnt ligand secretion mediator
<i>WNT10B</i>	Wnt family member 10B
<i>WNT2</i>	Wnt family member 2
<i>WNT4</i>	Wnt family member 4
<i>WT1</i>	Wilms tumor 1
<i>WWOX</i>	WW domain containing oxidoreductase
<i>XIAP</i>	X-linked inhibitor of apoptosis
<i>XPA</i>	XPA, DNA damage recognition and repair factor
<i>XPC</i>	XPC complex subunit, DNA damage recognition and repair factor
<i>XRCC1</i>	X-ray repair cross complementing 1
<i>XRCC3</i>	X-ray repair cross complementing 3
<i>YTHDC1</i>	YTH domain containing 1
<i>YWHAE</i>	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein epsilon
<i>ZC3H7A</i>	Zinc finger CCCH-type containing 7A
<i>ZC3H7B</i>	Zinc finger CCCH-type containing 7B

Table SIV. Continued.

Gene	Gene name
<i>ZEB1</i>	Zinc finger E-box binding homeobox 1
<i>ZFHX3</i>	Zinc finger homeobox 3
<i>ZFP36L1</i>	ZFP36 ring finger protein like 1
<i>ZHX2</i>	Zinc fingers and homeoboxes 2
<i>ZIC2</i>	Zic family member 2
<i>ZMYND10</i>	Zinc finger MYND-type containing 10
<i>ZNF645</i>	Zinc finger protein 645

Table SV. Association analysis of sample clusters with endometrial cancer clinicopathological parameters.

Clinicopathological parameter	Cluster 1	Cluster 2	Cluster 3	Cluster 4	P-value
Histology					<0.0001
Endometrioid	38	67	100	66	
Mixed	1	1	1	7	
Serous	2	18	1	31	
Stage					0.0004
I	27	58	85	53	
II	4	5	4	6	
III	8	14	12	36	
IV	1	6	1	8	
Histological grade					<0.0001
Grade 1	6	23	43	6	
Grade 2	10	26	43	12	
Grade 3	25	37	16	86	
Molecular subtype					<0.0001
CN High	6	19	2	33	
CN Low	2	28	57	3	
MSI	15	18	16	16	
POLE	3	6	2	6	

CN, copy number; MSI, microsatellite instability; POLE, DNA polymerase  $\epsilon$ . The number of cases corresponding to each category per cluster is shown for histological type, FIGO stage, grade and molecular subtype. Statistical analysis was conducted using Fisher's exact test.