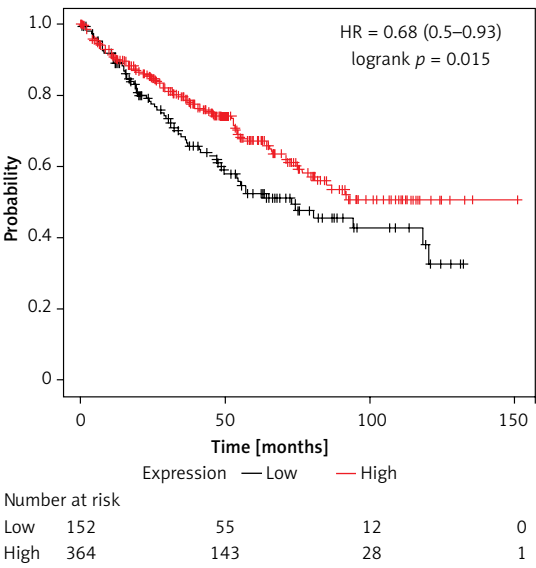
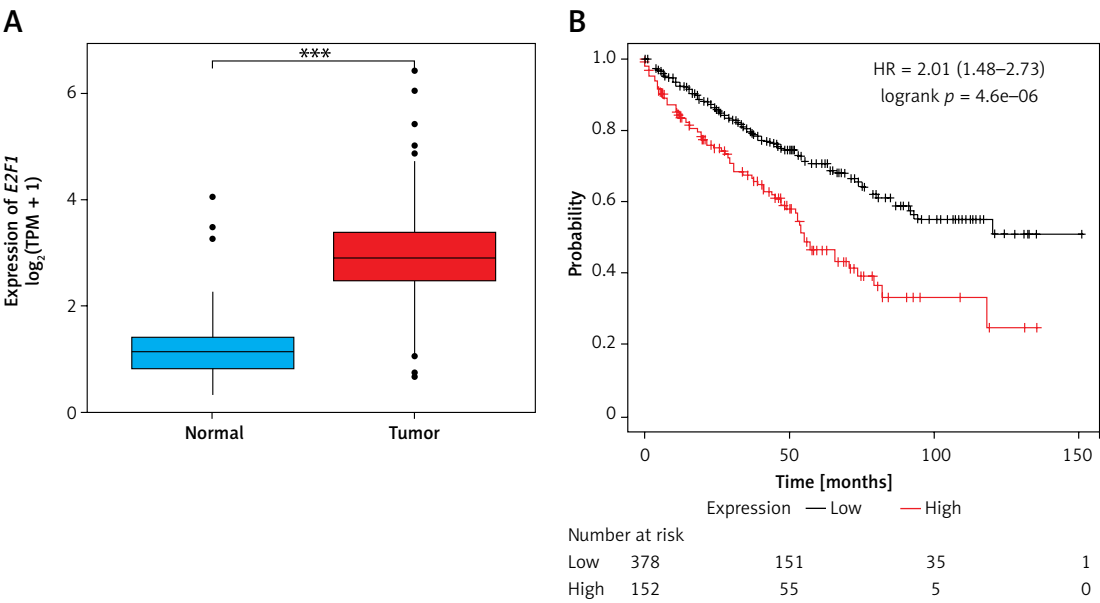




Supplemental Figure S1. Survival analysis of *hsa-mir-584*



Supplemental Figure S2. Differential expression (A) and survival analysis (B) of *E2F1*

Supplementary Table S1. Immune-related genes from ImmPort database

Gene symbol	Name	Category
<i>AZGP1</i>	alpha-2-glycoprotein 1, zinc-binding	Antigen_Processing_and_Presentation
<i>B2M</i>	beta-2-microglobulin	Antigen_Processing_and_Presentation
<i>CALR</i>	calreticulin	Antigen_Processing_and_Presentation
<i>CANX</i>	calnexin	Antigen_Processing_and_Presentation
<i>CD1A</i>	CD1a molecule	Antigen_Processing_and_Presentation
<i>CD1B</i>	CD1b molecule	Antigen_Processing_and_Presentation
<i>CD1C</i>	CD1c molecule	Antigen_Processing_and_Presentation
<i>CD1D</i>	CD1d molecule	Antigen_Processing_and_Presentation
<i>CD1E</i>	CD1e molecule	Antigen_Processing_and_Presentation
<i>CD4</i>	CD4 molecule	Antigen_Processing_and_Presentation
<i>CD8A</i>	CD8a molecule	Antigen_Processing_and_Presentation
<i>CD8B</i>	CD8b molecule	Antigen_Processing_and_Presentation
<i>CD74</i>	CD74 molecule	Antigen_Processing_and_Presentation
<i>CREB1</i>	cAMP responsive element binding protein 1	Antigen_Processing_and_Presentation
<i>CTSB</i>	cathepsin B	Antigen_Processing_and_Presentation
<i>CTSE</i>	cathepsin E	Antigen_Processing_and_Presentation
<i>CTSL</i>	cathepsin L	Antigen_Processing_and_Presentation
<i>CTSS</i>	cathepsin S	Antigen_Processing_and_Presentation
<i>FCER1G</i>	Fc fragment of IgE receptor Ig	Antigen_Processing_and_Presentation
<i>FCGRT</i>	Fc fragment of IgG receptor and transporter	Antigen_Processing_and_Presentation
<i>PDIA3</i>	protein disulfide isomerase family A member 3	Antigen_Processing_and_Presentation
<i>HFE</i>	homeostatic iron regulator	Antigen_Processing_and_Presentation
<i>HLA-A</i>	major histocompatibility complex, class I, A	Antigen_Processing_and_Presentation
<i>HLA-B</i>	major histocompatibility complex, class I, B	Antigen_Processing_and_Presentation
<i>HLA-C</i>	major histocompatibility complex, class I, C	Antigen_Processing_and_Presentation
<i>HLA-DMA</i>	major histocompatibility complex, class II, DM alpha	Antigen_Processing_and_Presentation
<i>HLA-DMB</i>	major histocompatibility complex, class II, DM beta	Antigen_Processing_and_Presentation
<i>HLA-DOA</i>	major histocompatibility complex, class II, DO alpha	Antigen_Processing_and_Presentation
<i>HLA-DOB</i>	major histocompatibility complex, class II, DO beta	Antigen_Processing_and_Presentation
<i>HLA-DPA1</i>	major histocompatibility complex, class II, DP alpha 1	Antigen_Processing_and_Presentation
<i>HLA-DPB1</i>	major histocompatibility complex, class II, DP beta 1	Antigen_Processing_and_Presentation
<i>HLA-DQA1</i>	major histocompatibility complex, class II, DQ alpha 1	Antigen_Processing_and_Presentation
<i>HLA-DQA2</i>	major histocompatibility complex, class II, DQ alpha 2	Antigen_Processing_and_Presentation
<i>HLA-DQB1</i>	major histocompatibility complex, class II, DQ beta 1	Antigen_Processing_and_Presentation
<i>HLA-DRA</i>	major histocompatibility complex, class II, DR alpha	Antigen_Processing_and_Presentation
<i>HLA-DRB1</i>	major histocompatibility complex, class II, DR beta 1	Antigen_Processing_and_Presentation
<i>HLA-DRB3</i>	major histocompatibility complex, class II, DR beta 3	Antigen_Processing_and_Presentation
<i>HLA-DRB4</i>	major histocompatibility complex, class II, DR beta 4	Antigen_Processing_and_Presentation
<i>HLA-DRB5</i>	major histocompatibility complex, class II, DR beta 5	Antigen_Processing_and_Presentation
<i>HLA-E</i>	major histocompatibility complex, class I, E	Antigen_Processing_and_Presentation
<i>HLA-F</i>	major histocompatibility complex, class I, F	Antigen_Processing_and_Presentation
<i>HLA-G</i>	major histocompatibility complex, class I, G	Antigen_Processing_and_Presentation
<i>HLA-H</i>	major histocompatibility complex, class I, H (pseudogene)	Antigen_Processing_and_Presentation
<i>MR1</i>	major histocompatibility complex, class I-related	Antigen_Processing_and_Presentation
<i>HSPA1A</i>	heat shock protein family A (Hsp70) member 1A	Antigen_Processing_and_Presentation
<i>HSPA1B</i>	heat shock protein family A (Hsp70) member 1B	Antigen_Processing_and_Presentation

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>HSPA1L</i>	heat shock protein family A (Hsp70) member 1 like	Antigen_Processing_and_Presentation
<i>HSPA2</i>	heat shock protein family A (Hsp70) member 2	Antigen_Processing_and_Presentation
<i>HSPA4</i>	heat shock protein family A (Hsp70) member 4	Antigen_Processing_and_Presentation
<i>HSPA5</i>	heat shock protein family A (Hsp70) member 5	Antigen_Processing_and_Presentation
<i>HSPA6</i>	heat shock protein family A (Hsp70) member 6	Antigen_Processing_and_Presentation
<i>HSPA8</i>	heat shock protein family A (Hsp70) member 8	Antigen_Processing_and_Presentation
<i>HSP90AA1</i>	heat shock protein 90 alpha family class A member 1	Antigen_Processing_and_Presentation
<i>HSP90AB1</i>	heat shock protein 90 alpha family class B member 1	Antigen_Processing_and_Presentation
<i>ICAM1</i>	intercellular adhesion molecule 1	Antigen_Processing_and_Presentation
<i>IFNA1</i>	interferon alpha 1	Antigen_Processing_and_Presentation
<i>IFNA2</i>	interferon alpha 2	Antigen_Processing_and_Presentation
<i>IFNA4</i>	interferon alpha 4	Antigen_Processing_and_Presentation
<i>IFNA5</i>	interferon alpha 5	Antigen_Processing_and_Presentation
<i>IFNA6</i>	interferon alpha 6	Antigen_Processing_and_Presentation
<i>IFNA7</i>	interferon alpha 7	Antigen_Processing_and_Presentation
<i>IFNA8</i>	interferon alpha 8	Antigen_Processing_and_Presentation
<i>IFNA10</i>	interferon alpha 10	Antigen_Processing_and_Presentation
<i>IFNA13</i>	interferon alpha 13	Antigen_Processing_and_Presentation
<i>IFNA14</i>	interferon alpha 14	Antigen_Processing_and_Presentation
<i>IFNA16</i>	interferon alpha 16	Antigen_Processing_and_Presentation
<i>IFNA17</i>	interferon alpha 17	Antigen_Processing_and_Presentation
<i>IFNA21</i>	interferon alpha 21	Antigen_Processing_and_Presentation
<i>IFNG</i>	interferon gamma	Antigen_Processing_and_Presentation
<i>KIR2DL1</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 1	Antigen_Processing_and_Presentation
<i>KIR2DL2</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	Antigen_Processing_and_Presentation
<i>KIR2DL3</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 3	Antigen_Processing_and_Presentation
<i>KIR2DL4</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	Antigen_Processing_and_Presentation
<i>KIR2DS1</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 1	Antigen_Processing_and_Presentation
<i>KIR2DS3</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3	Antigen_Processing_and_Presentation
<i>KIR2DS4</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4	Antigen_Processing_and_Presentation
<i>KIR2DS5</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 5	Antigen_Processing_and_Presentation
<i>KIR3DL1</i>	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1	Antigen_Processing_and_Presentation
<i>KIR3DL2</i>	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 2	Antigen_Processing_and_Presentation
<i>KLRC1</i>	killer cell lectin like receptor C1	Antigen_Processing_and_Presentation
<i>KLRC2</i>	killer cell lectin like receptor C2	Antigen_Processing_and_Presentation
<i>KLRC3</i>	killer cell lectin like receptor C3	Antigen_Processing_and_Presentation
<i>KLRD1</i>	killer cell lectin like receptor D1	Antigen_Processing_and_Presentation
<i>LTA</i>	lymphotoxin alpha	Antigen_Processing_and_Presentation
<i>CIITA</i>	class II major histocompatibility complex transactivator	Antigen_Processing_and_Presentation

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>MICA</i>	MHC class I polypeptide-related sequence A	Antigen_Processing_and_Presentation
<i>MICB</i>	MHC class I polypeptide-related sequence B	Antigen_Processing_and_Presentation
<i>NFYA</i>	nuclear transcription factor Y subunit alpha	Antigen_Processing_and_Presentation
<i>NFYB</i>	nuclear transcription factor Y subunit beta	Antigen_Processing_and_Presentation
<i>NFYC</i>	nuclear transcription factor Y subunit gamma	Antigen_Processing_and_Presentation
<i>LGMN</i>	legumain	Antigen_Processing_and_Presentation
<i>PSMB8</i>	proteasome 20S subunit beta 8	Antigen_Processing_and_Presentation
<i>PSMC1</i>	proteasome 26S subunit, ATPase 1	Antigen_Processing_and_Presentation
<i>PSMC2</i>	proteasome 26S subunit, ATPase 2	Antigen_Processing_and_Presentation
<i>PSMC3</i>	proteasome 26S subunit, ATPase 3	Antigen_Processing_and_Presentation
<i>PSMC4</i>	proteasome 26S subunit, ATPase 4	Antigen_Processing_and_Presentation
<i>PSMC5</i>	proteasome 26S subunit, ATPase 5	Antigen_Processing_and_Presentation
<i>PSMC6</i>	proteasome 26S subunit, ATPase 6	Antigen_Processing_and_Presentation
<i>PSMD1</i>	proteasome 26S subunit, non-ATPase 1	Antigen_Processing_and_Presentation
<i>PSMD2</i>	proteasome 26S subunit, non-ATPase 2	Antigen_Processing_and_Presentation
<i>PSMD3</i>	proteasome 26S subunit, non-ATPase 3	Antigen_Processing_and_Presentation
<i>PSMD4</i>	proteasome 26S subunit, non-ATPase 4	Antigen_Processing_and_Presentation
<i>PSMD5</i>	proteasome 26S subunit, non-ATPase 5	Antigen_Processing_and_Presentation
<i>PSMD7</i>	proteasome 26S subunit, non-ATPase 7	Antigen_Processing_and_Presentation
<i>PSMD8</i>	proteasome 26S subunit, non-ATPase 8	Antigen_Processing_and_Presentation
<i>PSMD10</i>	proteasome 26S subunit, non-ATPase 10	Antigen_Processing_and_Presentation
<i>PSMD11</i>	proteasome 26S subunit, non-ATPase 11	Antigen_Processing_and_Presentation
<i>PSMD13</i>	proteasome 26S subunit, non-ATPase 13	Antigen_Processing_and_Presentation
<i>PSME1</i>	proteasome activator subunit 1	Antigen_Processing_and_Presentation
<i>PSME1</i>	proteasome activator subunit 1	Antigen_Processing_and_Presentation
<i>PSME2</i>	proteasome activator subunit 2	Antigen_Processing_and_Presentation
<i>PSME2</i>	proteasome activator subunit 2	Antigen_Processing_and_Presentation
<i>RELB</i>	RELB proto-oncogene, NF-kB subunit	Antigen_Processing_and_Presentation
<i>RFX5</i>	regulatory factor X5	Antigen_Processing_and_Presentation
<i>RFXAP</i>	regulatory factor X associated protein	Antigen_Processing_and_Presentation
<i>SLC10A2</i>	solute carrier family 10 member 2	Antigen_Processing_and_Presentation
<i>TAP1</i>	transporter 1, ATP binding cassette subfamily B member	Antigen_Processing_and_Presentation
<i>TAP2</i>	transporter 2, ATP binding cassette subfamily B member	Antigen_Processing_and_Presentation
<i>TAPBP</i>	TAP binding protein	Antigen_Processing_and_Presentation
<i>THBS1</i>	thrombospondin 1	Antigen_Processing_and_Presentation
<i>SEM1</i>	SEM1 26S proteasome complex subunit	Antigen_Processing_and_Presentation
<i>KLRC4</i>	killer cell lectin like receptor C4	Antigen_Processing_and_Presentation
<i>AP3B1</i>	adaptor related protein complex 3 subunit beta 1	Antigen_Processing_and_Presentation
<i>RFXANK</i>	regulatory factor X associated ankyrin containing protein	Antigen_Processing_and_Presentation
<i>PSMD6</i>	proteasome 26S subunit, non-ATPase 6	Antigen_Processing_and_Presentation
<i>PSME3</i>	proteasome activator subunit 3	Antigen_Processing_and_Presentation
<i>PSMD14</i>	proteasome 26S subunit, non-ATPase 14	Antigen_Processing_and_Presentation
<i>CLEC4M</i>	C-type lectin domain family 4 member M	Antigen_Processing_and_Presentation
<i>IFI30</i>	IFI30 lysosomal thiol reductase	Antigen_Processing_and_Presentation
<i>PROCR</i>	protein C receptor	Antigen_Processing_and_Presentation
<i>ADRM1</i>	adhesion regulating molecule 1	Antigen_Processing_and_Presentation

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>ECPAS</i>	Ecm29 proteasome adaptor and scaffold	Antigen_Processing_and_Presentation
<i>TRPC4AP</i>	transient receptor potential cation channel subfamily C member 4 associated protein	Antigen_Processing_and_Presentation
<i>CD209</i>	CD209 molecule	Antigen_Processing_and_Presentation
<i>UBXN1</i>	UBX domain protein 1	Antigen_Processing_and_Presentation
<i>ERAP1</i>	endoplasmic reticulum aminopeptidase 1	Antigen_Processing_and_Presentation
<i>TAPBP</i>	TAP binding protein like	Antigen_Processing_and_Presentation
<i>KIR2DL5A</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 5A	Antigen_Processing_and_Presentation
<i>ERAP2</i>	endoplasmic reticulum aminopeptidase 2	Antigen_Processing_and_Presentation
<i>ULBP3</i>	UL16 binding protein 3	Antigen_Processing_and_Presentation
<i>ULBP2</i>	UL16 binding protein 2	Antigen_Processing_and_Presentation
<i>ULBP1</i>	UL16 binding protein 1	Antigen_Processing_and_Presentation
<i>KIR3DL3</i>	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 3	Antigen_Processing_and_Presentation
<i>RAET1E</i>	retinoic acid early transcript 1E	Antigen_Processing_and_Presentation
<i>RAET1L</i>	retinoic acid early transcript 1L	Antigen_Processing_and_Presentation
<i>UBR1</i>	ubiquitin protein ligase E3 component n-recogin 1	Antigen_Processing_and_Presentation
<i>RAET1G</i>	retinoic acid early transcript 1G	Antigen_Processing_and_Presentation
<i>PDIA2</i>	protein disulfide isomerase family A member 2	Antigen_Processing_and_Presentation
<i>HAMP</i>	hepcidin antimicrobial peptide	Antimicrobials
<i>PI3</i>	peptidase inhibitor 3	Antimicrobials
<i>CAMP</i>	cathelicidin antimicrobial peptide	Antimicrobials
<i>DEFB4A</i>	defensin beta 4A	Antimicrobials
<i>PPBP</i>	pro-platelet basic protein	Antimicrobials
<i>REG3G</i>	regenerating family member 3 gamma	Antimicrobials
<i>CXCL14</i>	C-X-C motif chemokine ligand 14	Antimicrobials
<i>CXCL16</i>	C-X-C motif chemokine ligand 16	Antimicrobials
<i>SLPI</i>	secretory leukocyte peptidase inhibitor	Antimicrobials
<i>CXCL8</i>	C-X-C motif chemokine ligand 8	Antimicrobials
<i>CXCL10</i>	C-X-C motif chemokine ligand 10	Antimicrobials
<i>CXCL9</i>	C-X-C motif chemokine ligand 9	Antimicrobials
<i>CXCL5</i>	C-X-C motif chemokine ligand 5	Antimicrobials
<i>CXCL11</i>	C-X-C motif chemokine ligand 11	Antimicrobials
<i>CXCL6</i>	C-X-C motif chemokine ligand 6	Antimicrobials
<i>CXCL1</i>	C-X-C motif chemokine ligand 1	Antimicrobials
<i>CXCL12</i>	C-X-C motif chemokine ligand 12	Antimicrobials
<i>CXCL13</i>	C-X-C motif chemokine ligand 13	Antimicrobials
<i>CXCL2</i>	C-X-C motif chemokine ligand 2	Antimicrobials
<i>PF4</i>	platelet factor 4	Antimicrobials
<i>XCL1</i>	X-C motif chemokine ligand 1	Antimicrobials
<i>CXCL3</i>	C-X-C motif chemokine ligand 3	Antimicrobials
<i>DEFB103B</i>	defensin beta 103B	Antimicrobials
<i>CCL13</i>	C-C motif chemokine ligand 13	Antimicrobials
<i>CCL1</i>	C-C motif chemokine ligand 1	Antimicrobials
<i>DEFB1</i>	defensin beta 1	Antimicrobials
<i>CCL8</i>	C-C motif chemokine ligand 8	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>ELANE</i>	elastase, neutrophil expressed	Antimicrobials
<i>DEFB103A</i>	defensin beta 103A	Antimicrobials
<i>DEFA3</i>	defensin alpha 3	Antimicrobials
<i>DEFA1</i>	defensin alpha 1	Antimicrobials
<i>TMSB10</i>	thymosin beta 10	Antimicrobials
<i>DEFA6</i>	defensin alpha 6	Antimicrobials
<i>DEFA5</i>	defensin alpha 5	Antimicrobials
<i>DEFA4</i>	defensin alpha 4	Antimicrobials
<i>LCN2</i>	lipocalin 2	Antimicrobials
<i>LCN1</i>	lipocalin 1	Antimicrobials
<i>COLEC10</i>	collectin subfamily member 10	Antimicrobials
<i>BPI</i>	bactericidal permeability increasing protein	Antimicrobials
<i>S100A9</i>	S100 calcium binding protein A9	Antimicrobials
<i>S100A8</i>	S100 calcium binding protein A8	Antimicrobials
<i>DCD</i>	dermcidin	Antimicrobials
<i>LCN6</i>	lipocalin 6	Antimicrobials
<i>S100A12</i>	S100 calcium binding protein A12	Antimicrobials
<i>HTN3</i>	histatin 3	Antimicrobials
<i>LCN8</i>	lipocalin 8	Antimicrobials
<i>DEFA1B</i>	defensin alpha 1B	Antimicrobials
<i>CCR10</i>	C-C motif chemokine receptor 10	Antimicrobials
<i>CELA1</i>	chymotrypsin like elastase 1	Antimicrobials
<i>DEFB106A</i>	defensin beta 106A	Antimicrobials
<i>PENK</i>	proenkephalin	Antimicrobials
<i>BPIFC</i>	BPI fold containing family C	Antimicrobials
<i>MMP12</i>	matrix metalloproteinase 12	Antimicrobials
<i>BPIFB6</i>	BPI fold containing family B member 6	Antimicrobials
<i>LEAP2</i>	liver enriched antimicrobial peptide 2	Antimicrobials
<i>SFTPD</i>	surfactant protein D	Antimicrobials
<i>LCN9</i>	lipocalin 9	Antimicrobials
<i>BPIFB2</i>	BPI fold containing family B member 2	Antimicrobials
<i>PTGDS</i>	prostaglandin D2 synthase	Antimicrobials
<i>TMSB4X</i>	thymosin beta 4 X-linked	Antimicrobials
<i>PGLYRP1</i>	peptidoglycan recognition protein 1	Antimicrobials
<i>ZC3HAV1</i>	zinc finger CCCH-type containing, antiviral 1	Antimicrobials
<i>TMSB15A</i>	thymosin beta 15a	Antimicrobials
<i>S100B</i>	S100 calcium binding protein B	Antimicrobials
<i>S100A13</i>	S100 calcium binding protein A13	Antimicrobials
<i>S100A6</i>	S100 calcium binding protein A6	Antimicrobials
<i>DEFB119</i>	defensin beta 119	Antimicrobials
<i>DEFB107A</i>	defensin beta 107A	Antimicrobials
<i>DEFB105A</i>	defensin beta 105A	Antimicrobials
<i>SERPIND1</i>	serpin family D member 1	Antimicrobials
<i>DEFB129</i>	defensin beta 129	Antimicrobials
<i>DEFB127</i>	defensin beta 127	Antimicrobials
<i>S100P</i>	S100 calcium binding protein P	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>S100A7</i>	S100 calcium binding protein A7	Antimicrobials
<i>DEFB104A</i>	defensin beta 104A	Antimicrobials
<i>DEFB126</i>	defensin beta 126	Antimicrobials
<i>DEFB106B</i>	defensin beta 106B	Antimicrobials
<i>DEFB104B</i>	defensin beta 104B	Antimicrobials
<i>DEFB107B</i>	defensin beta 107B	Antimicrobials
<i>PGLYRP3</i>	peptidoglycan recognition protein 3	Antimicrobials
<i>PGLYRP2</i>	peptidoglycan recognition protein 2	Antimicrobials
<i>S100A10</i>	S100 calcium binding protein A10	Antimicrobials
<i>S100A2</i>	S100 calcium binding protein A2	Antimicrobials
<i>DEFB125</i>	defensin beta 125	Antimicrobials
<i>DEFB123</i>	defensin beta 123	Antimicrobials
<i>DEFB105B</i>	defensin beta 105B	Antimicrobials
<i>DEFB132</i>	defensin beta 132	Antimicrobials
<i>BPIFB3</i>	BPI fold containing family B member 3	Antimicrobials
<i>LCN12</i>	lipocalin 12	Antimicrobials
<i>PGLYRP4</i>	peptidoglycan recognition protein 4	Antimicrobials
<i>S100A11</i>	S100 calcium binding protein A11	Antimicrobials
<i>S100A5</i>	S100 calcium binding protein A5	Antimicrobials
<i>S100A3</i>	S100 calcium binding protein A3	Antimicrobials
<i>S100A1</i>	S100 calcium binding protein A1	Antimicrobials
<i>DEFB128</i>	defensin beta 128	Antimicrobials
<i>DEFB108B</i>	defensin beta 108B	Antimicrobials
<i>HTN1</i>	histatin 1	Antimicrobials
<i>LMBR1L</i>	limb development membrane protein 1 like	Antimicrobials
<i>S100A7A</i>	S100 calcium binding protein A7A	Antimicrobials
<i>DEFB118</i>	defensin beta 118	Antimicrobials
<i>COLEC12</i>	collectin subfamily member 12	Antimicrobials
<i>TMSB4Y</i>	thymosin beta 4 Y-linked	Antimicrobials
<i>DEFB131A</i>	defensin beta 131A	Antimicrobials
<i>DEFB134</i>	defensin beta 134	Antimicrobials
<i>DEFB130A</i>	defensin beta 130A	Antimicrobials
<i>DEFB124</i>	defensin beta 124	Antimicrobials
<i>DEFB121</i>	defensin beta 121	Antimicrobials
<i>DEFB116</i>	defensin beta 116	Antimicrobials
<i>DEFB115</i>	defensin beta 115	Antimicrobials
<i>DEFB114</i>	defensin beta 114	Antimicrobials
<i>DEFB113</i>	defensin beta 113	Antimicrobials
<i>DEFB112</i>	defensin beta 112	Antimicrobials
<i>DEFB110</i>	defensin beta 110	Antimicrobials
<i>TMSB15B</i>	thymosin beta 15B	Antimicrobials
<i>DEFB133</i>	defensin beta 133	Antimicrobials
<i>S100Z</i>	S100 calcium binding protein Z	Antimicrobials
<i>MAVS</i>	mitochondrial antiviral signaling protein	Antimicrobials
<i>TMSB4XP8</i>	TMSB4X pseudogene 8	Antimicrobials
<i>S100A14</i>	S100 calcium binding protein A14	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>LCN10</i>	lipocalin 10	Antimicrobials
<i>S100A16</i>	S100 calcium binding protein A16	Antimicrobials
<i>DEFB136</i>	defensin beta 136	Antimicrobials
<i>DEFB135</i>	defensin beta 135	Antimicrobials
<i>DEFB117</i>	defensin beta 117 (pseudogene)	Antimicrobials
<i>DEFB110</i>	defensin beta 110	Antimicrobials
<i>ZC3HAV1L</i>	zinc finger CCCH-type containing, antiviral 1 like	Antimicrobials
<i>S100A7L2</i>	S100 calcium binding protein A7 like 2	Antimicrobials
<i>MBL3P</i>	mannose-binding lectin family member 3, pseudogene	Antimicrobials
<i>DEFB4B</i>	defensin beta 4B	Antimicrobials
<i>BPIFB4</i>	BPI fold containing family B member 4	Antimicrobials
<i>IFNAR1</i>	interferon alpha and beta receptor subunit 1	Antimicrobials
<i>AZU1</i>	azurocidin 1	Antimicrobials
<i>DEFB131B</i>	defensin beta 131B	Antimicrobials
<i>DEFA1A3</i>	defensin alpha 1 and alpha 3, variable copy number locus	Antimicrobials
<i>LCN1P1</i>	lipocalin 1 pseudogene 1	Antimicrobials
<i>S100G</i>	S100 calcium binding protein G	Antimicrobials
<i>DEFA7P</i>	defensin alpha 7, pseudogene	Antimicrobials
<i>DEFB130B</i>	defensin beta 130B	Antimicrobials
<i>DEFB108F</i>	defensin beta 108F (pseudogene)	Antimicrobials
<i>DEFB131C</i>	defensin beta 131C (pseudogene)	Antimicrobials
<i>TCHHL1</i>	trichohyalin like 1	Antimicrobials
<i>TINAGL1</i>	tubulointerstitial nephritis antigen like 1	Antimicrobials
<i>IFNGR1</i>	interferon gamma receptor 1	Antimicrobials
<i>SLC22A17</i>	solute carrier family 22 member 17	Antimicrobials
<i>WFIKKN1</i>	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 1	Antimicrobials
<i>WFDC2</i>	WAP four-disulfide core domain 2	Antimicrobials
<i>IL6</i>	interleukin 6	Antimicrobials
<i>UMODL1</i>	uromodulin like 1	Antimicrobials
<i>TGFB1</i>	transforming growth factor beta 1	Antimicrobials
<i>PF4V1</i>	platelet factor 4 variant 1	Antimicrobials
<i>MMP9</i>	matrix metalloproteinase 9	Antimicrobials
<i>ANOS1</i>	anosmin 1	Antimicrobials
<i>TLR4</i>	toll like receptor 4	Antimicrobials
<i>IFNG</i>	interferon gamma	Antimicrobials
<i>SPAG11B</i>	sperm associated antigen 11B	Antimicrobials
<i>A2M</i>	alpha-2-macroglobulin	Antimicrobials
<i>CTSL</i>	cathepsin L	Antimicrobials
<i>NFKB1</i>	nuclear factor kappa B subunit 1	Antimicrobials
<i>APOBEC3G</i>	apolipoprotein B mRNA editing enzyme catalytic subunit 3G	Antimicrobials
<i>FABP6</i>	fatty acid binding protein 6	Antimicrobials
<i>NOD2</i>	nucleotide binding oligomerization domain containing 2	Antimicrobials
<i>MBL2</i>	mannose binding lectin 2	Antimicrobials
<i>SFTPA1</i>	surfactant protein A1	Antimicrobials
<i>RBP1</i>	retinol binding protein 1	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TLR2</i>	toll like receptor 2	Antimicrobials
<i>SLC40A1</i>	solute carrier family 40 member 1	Antimicrobials
<i>PLAU</i>	plasminogen activator, urokinase	Antimicrobials
<i>IL1B</i>	interleukin 1 beta	Antimicrobials
<i>PAEP</i>	progestagen associated endometrial protein	Antimicrobials
<i>HJV</i>	hemojuvelin BMP co-receptor	Antimicrobials
<i>MUC5AC</i>	mucin 5AC, oligomeric mucus/gel-forming	Antimicrobials
<i>CTSS</i>	cathepsin S	Antimicrobials
<i>OBP2A</i>	odorant binding protein 2A	Antimicrobials
<i>PLTP</i>	phospholipid transfer protein	Antimicrobials
<i>MX1</i>	MX dynamin like GTPase 1	Antimicrobials
<i>DDX58</i>	DExD/H-box helicase 58	Antimicrobials
<i>IFNL1</i>	interferon lambda 1	Antimicrobials
<i>IRF3</i>	interferon regulatory factor 3	Antimicrobials
<i>SFTPA2</i>	surfactant protein A2	Antimicrobials
<i>LPA</i>	lipoprotein(a)	Antimicrobials
<i>LBP</i>	lipopolysaccharide binding protein	Antimicrobials
<i>RBP4</i>	retinol binding protein 4	Antimicrobials
<i>SFTPA1</i>	surfactant protein A1	Antimicrobials
<i>NOX4</i>	NADPH oxidase 4	Antimicrobials
<i>LTF</i>	lactotransferrin	Antimicrobials
<i>IFNB1</i>	interferon beta 1	Antimicrobials
<i>RBP5</i>	retinol binding protein 5	Antimicrobials
<i>FABP7</i>	fatty acid binding protein 7	Antimicrobials
<i>FABP5</i>	fatty acid binding protein 5	Antimicrobials
<i>FABP3</i>	fatty acid binding protein 3	Antimicrobials
<i>FABP2</i>	fatty acid binding protein 2	Antimicrobials
<i>FABP4</i>	fatty acid binding protein 4	Antimicrobials
<i>R3HDM1</i>	R3H domain containing like	Antimicrobials
<i>BPIFA3</i>	BPI fold containing family A member 3	Antimicrobials
<i>BPIFB1</i>	BPI fold containing family B member 1	Antimicrobials
<i>OASL</i>	2'-5'-oligoadenylate synthetase like	Antimicrobials
<i>CRABP2</i>	cellular retinoic acid binding protein 2	Antimicrobials
<i>CRABP1</i>	cellular retinoic acid binding protein 1	Antimicrobials
<i>RBP7</i>	retinol binding protein 7	Antimicrobials
<i>DUOX1</i>	dual oxidase 1	Antimicrobials
<i>OBP2B</i>	odorant binding protein 2B	Antimicrobials
<i>RBP2</i>	retinol binding protein 2	Antimicrobials
<i>LCN15</i>	lipocalin 15	Antimicrobials
<i>CETP</i>	cholesteryl ester transfer protein	Antimicrobials
<i>FABP12</i>	fatty acid binding protein 12	Antimicrobials
<i>FABP9</i>	fatty acid binding protein 9	Antimicrobials
<i>BPIFA1</i>	BPI fold containing family A member 1	Antimicrobials
<i>LCNL1</i>	lipocalin like 1	Antimicrobials
<i>C8G</i>	complement C8 gamma chain	Antimicrobials
<i>SPAG11A</i>	sperm associated antigen 11A	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>PI15</i>	peptidase inhibitor 15	Antimicrobials
<i>NOX1</i>	NADPH oxidase 1	Antimicrobials
<i>PMP2</i>	peripheral myelin protein 2	Antimicrobials
<i>APOD</i>	apolipoprotein D	Antimicrobials
<i>ORM2</i>	orosomucoid 2	Antimicrobials
<i>ORM1</i>	orosomucoid 1	Antimicrobials
<i>TNF</i>	tumor necrosis factor	Antimicrobials
<i>CTSG</i>	cathepsin G	Antimicrobials
<i>PRTN3</i>	proteinase 3	Antimicrobials
<i>MAPK1</i>	mitogen-activated protein kinase 1	Antimicrobials
<i>PML</i>	PML nuclear body scaffold	Antimicrobials
<i>AEN</i>	apoptosis enhancing nuclease	Antimicrobials
<i>CYBB</i>	cytochrome b-245 beta chain	Antimicrobials
<i>BPIFA2</i>	BPI fold containing family A member 2	Antimicrobials
<i>ISG20</i>	interferon stimulated exonuclease gene 20	Antimicrobials
<i>BCL3</i>	BCL3 transcription coactivator	Antimicrobials
<i>ISG20L2</i>	interferon stimulated exonuclease gene 20 like 2	Antimicrobials
<i>NOX5</i>	NADPH oxidase 5	Antimicrobials
<i>NOX3</i>	NADPH oxidase 3	Antimicrobials
<i>DUOX2</i>	dual oxidase 2	Antimicrobials
<i>TLR3</i>	toll like receptor 3	Antimicrobials
<i>TFRC</i>	transferrin receptor	Antimicrobials
<i>IFIH1</i>	interferon induced with helicase C domain 1	Antimicrobials
<i>LRP1</i>	LDL receptor related protein 1	Antimicrobials
<i>TRIM5</i>	tripartite motif containing 5	Antimicrobials
<i>IDO1</i>	indoleamine 2,3-dioxygenase 1	Antimicrobials
<i>GDF15</i>	growth differentiation factor 15	Antimicrobials
<i>NEDD4</i>	NEDD4 E3 ubiquitin protein ligase	Antimicrobials
<i>ADIPOQ</i>	adiponectin, C1Q and collagen domain containing	Antimicrobials
<i>STAT3</i>	signal transducer and activator of transcription 3	Antimicrobials
<i>STAT1</i>	signal transducer and activator of transcription 1	Antimicrobials
<i>IFNL2</i>	interferon lambda 2	Antimicrobials
<i>SOCS3</i>	suppressor of cytokine signaling 3	Antimicrobials
<i>SEMG1</i>	semenogelin 1	Antimicrobials
<i>TNFSF10</i>	TNF superfamily member 10	Antimicrobials
<i>CCL20</i>	C-C motif chemokine ligand 20	Antimicrobials
<i>SOCS1</i>	suppressor of cytokine signaling 1	Antimicrobials
<i>RNASEL</i>	ribonuclease L	Antimicrobials
<i>IRF1</i>	interferon regulatory factor 1	Antimicrobials
<i>IL15</i>	interleukin 15	Antimicrobials
<i>APOBEC3F</i>	apolipoprotein B mRNA editing enzyme catalytic subunit 3F	Antimicrobials
<i>PLAAT4</i>	phospholipase A and acyltransferase 4	Antimicrobials
<i>CHIT1</i>	chitinase 1	Antimicrobials
<i>IFNA1</i>	interferon alpha 1	Antimicrobials
<i>CD40</i>	CD40 molecule	Antimicrobials
<i>TLR7</i>	toll like receptor 7	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>PPIA</i>	peptidylprolyl isomerase A	Antimicrobials
<i>HFE</i>	homeostatic iron regulator	Antimicrobials
<i>ZYX</i>	zyxin	Antimicrobials
<i>NLRX1</i>	NLR family member X1	Antimicrobials
<i>PGC</i>	progastricin	Antimicrobials
<i>VEGFA</i>	vascular endothelial growth factor A	Antimicrobials
<i>IKBKE</i>	inhibitor of nuclear factor kappa B kinase subunit epsilon	Antimicrobials
<i>ISG15</i>	ISG15 ubiquitin like modifier	Antimicrobials
<i>DHX58</i>	DExH-box helicase 58	Antimicrobials
<i>TNFAIP3</i>	TNF alpha induced protein 3	Antimicrobials
<i>TFR2</i>	transferrin receptor 2	Antimicrobials
<i>FCN2</i>	ficolin 2	Antimicrobials
<i>MUC4</i>	mucin 4, cell surface associated	Antimicrobials
<i>F2R</i>	coagulation factor II thrombin receptor	Antimicrobials
<i>ELN</i>	elastin	Antimicrobials
<i>IL27</i>	interleukin 27	Antimicrobials
<i>MAPT</i>	microtubule associated protein tau	Antimicrobials
<i>LYZ</i>	lysozyme	Antimicrobials
<i>CCL5</i>	C-C motif chemokine ligand 5	Antimicrobials
<i>LEP</i>	leptin	Antimicrobials
<i>CYLD</i>	CYLD lysine 63 deubiquitinase	Antimicrobials
<i>KLKB1</i>	kallikrein B1	Antimicrobials
<i>CST4</i>	cystatin S	Antimicrobials
<i>CSRP1</i>	cysteine and glycine rich protein 1	Antimicrobials
<i>MAPK14</i>	mitogen-activated protein kinase 14	Antimicrobials
<i>JUN</i>	Jun proto-oncogene, AP-1 transcription factor subunit	Antimicrobials
<i>ITGAV</i>	integrin subunit alpha V	Antimicrobials
<i>IRF5</i>	interferon regulatory factor 5	Antimicrobials
<i>CCR6</i>	C-C motif chemokine receptor 6	Antimicrobials
<i>IL12B</i>	interleukin 12B	Antimicrobials
<i>TLR8</i>	toll like receptor 8	Antimicrobials
<i>GNLY</i>	granulysin	Antimicrobials
<i>CD81</i>	CD81 molecule	Antimicrobials
<i>EIF2AK2</i>	eukaryotic translation initiation factor 2 alpha kinase 2	Antimicrobials
<i>APOM</i>	apolipoprotein M	Antimicrobials
<i>CACYBP</i>	calcylin binding protein	Antimicrobials
<i>NOD1</i>	nucleotide binding oligomerization domain containing 1	Antimicrobials
<i>MAPK8</i>	mitogen-activated protein kinase 8	Antimicrobials
<i>MAPK3</i>	mitogen-activated protein kinase 3	Antimicrobials
<i>BST2</i>	bone marrow stromal cell antigen 2	Antimicrobials
<i>BPHL</i>	biphenyl hydrolase like	Antimicrobials
<i>PLA2G2A</i>	phospholipase A2 group IIA	Antimicrobials
<i>GRN</i>	granulin precursor	Antimicrobials
<i>NEWENTRY</i>	-	Antimicrobials
<i>PDGFRA</i>	platelet derived growth factor receptor alpha	Antimicrobials
<i>GNAI1</i>	G protein subunit alpha i1	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>WNT5A</i>	Wnt family member 5A	Antimicrobials
<i>FURIN</i>	furin, paired basic amino acid cleaving enzyme	Antimicrobials
<i>ADAR</i>	adenosine deaminase RNA specific	Antimicrobials
<i>TYK2</i>	tyrosine kinase 2	Antimicrobials
<i>NOS2</i>	nitric oxide synthase 2	Antimicrobials
<i>TRAF3</i>	TNF receptor associated factor 3	Antimicrobials
<i>TPT1</i>	tumor protein, translationally-controlled 1	Antimicrobials
<i>TPM2</i>	tropomyosin 2	Antimicrobials
<i>NEO1</i>	neogenin 1	Antimicrobials
<i>AHNAK</i>	AHNAK nucleoprotein	Antimicrobials
<i>TLR1</i>	toll like receptor 1	Antimicrobials
<i>TK2</i>	thymidine kinase 2	Antimicrobials
<i>PRDX2</i>	peroxiredoxin 2	Antimicrobials
<i>MX2</i>	MX dynamin like GTPase 2	Antimicrobials
<i>FGF2</i>	fibroblast growth factor 2	Antimicrobials
<i>FGA</i>	fibrinogen alpha chain	Antimicrobials
<i>TCF7L2</i>	transcription factor 7 like 2	Antimicrobials
<i>F2RL1</i>	F2R like trypsin receptor 1	Antimicrobials
<i>TKFC</i>	triokinase and FMN cyclase	Antimicrobials
<i>MSR1</i>	macrophage scavenger receptor 1	Antimicrobials
<i>NFKBIZ</i>	NFKB inhibitor zeta	Antimicrobials
<i>LMBR1</i>	limb development membrane protein 1	Antimicrobials
<i>EPPIN</i>	epididymal peptidase inhibitor	Antimicrobials
<i>SRC</i>	SRC proto-oncogene, non-receptor tyrosine kinase	Antimicrobials
<i>MPO</i>	myeloperoxidase	Antimicrobials
<i>ELAVL1</i>	ELAV like RNA binding protein 1	Antimicrobials
<i>ROBO3</i>	roundabout guidance receptor 3	Antimicrobials
<i>SP1</i>	Sp1 transcription factor	Antimicrobials
<i>SOD1</i>	superoxide dismutase 1	Antimicrobials
<i>PDF</i>	peptide deformylase, mitochondrial	Antimicrobials
<i>DLL4</i>	delta like canonical Notch ligand 4	Antimicrobials
<i>ECD</i>	ecdysoneless cell cycle regulator	Antimicrobials
<i>SLC11A1</i>	solute carrier family 11 member 1	Antimicrobials
<i>DMBT1</i>	deleted in malignant brain tumors 1	Antimicrobials
<i>STING1</i>	stimulator of interferon response cGAMP interactor 1	Antimicrobials
<i>SKI2L</i>	Ski2 like RNA helicase	Antimicrobials
<i>SEMG2</i>	semenogelin 2	Antimicrobials
<i>LTA</i>	lymphotoxin alpha	Antimicrobials
<i>DES</i>	desmin	Antimicrobials
<i>DCK</i>	deoxycytidine kinase	Antimicrobials
<i>DAXX</i>	death domain associated protein	Antimicrobials
<i>TNFRSF10A</i>	TNF receptor superfamily member 10a	Antimicrobials
<i>TNFRSF10B</i>	TNF receptor superfamily member 10b	Antimicrobials
<i>EED</i>	embryonic ectoderm development	Antimicrobials
<i>CCL4</i>	C-C motif chemokine ligand 4	Antimicrobials
<i>LIMS1</i>	LIM zinc finger domain containing 1	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>LALBA</i>	lactalbumin alpha	Antimicrobials
<i>APOBEC3H</i>	apolipoprotein B mRNA editing enzyme catalytic subunit 3H	Antimicrobials
<i>TMPRSS6</i>	transmembrane serine protease 6	Antimicrobials
<i>SPINK5</i>	serine peptidase inhibitor Kazal type 5	Antimicrobials
<i>MARCO</i>	macrophage receptor with collagenous structure	Antimicrobials
<i>BECN1</i>	beclin 1	Antimicrobials
<i>TNFSF11</i>	TNF superfamily member 11	Antimicrobials
<i>KNG1</i>	kininogen 1	Antimicrobials
<i>CSK</i>	C-terminal Src kinase	Antimicrobials
<i>KLRK1</i>	killer cell lectin like receptor K1	Antimicrobials
<i>KCNH2</i>	potassium voltage-gated channel subfamily H member 2	Antimicrobials
<i>JUND</i>	JunD proto-oncogene, AP-1 transcription factor subunit	Antimicrobials
<i>JAK1</i>	Janus kinase 1	Antimicrobials
<i>CREB1</i>	cAMP responsive element binding protein 1	Antimicrobials
<i>CLDN4</i>	claudin 4	Antimicrobials
<i>CCL28</i>	C-C motif chemokine ligand 28	Antimicrobials
<i>RNASE3</i>	ribonuclease A family member 3	Antimicrobials
<i>RN7SL1</i>	RNA component of signal recognition particle 7SL1	Antimicrobials
<i>IRF7</i>	interferon regulatory factor 7	Antimicrobials
<i>IREB2</i>	iron responsive element binding protein 2	Antimicrobials
<i>ILK</i>	integrin linked kinase	Antimicrobials
<i>IL18</i>	interleukin 18	Antimicrobials
<i>IL17A</i>	interleukin 17A	Antimicrobials
<i>LTB4R</i>	leukotriene B4 receptor	Antimicrobials
<i>APOBEC3A</i>	apolipoprotein B mRNA editing enzyme catalytic subunit 3A	Antimicrobials
<i>MASP2</i>	mannan binding lectin serine peptidase 2	Antimicrobials
<i>TRIM27</i>	tripartite motif containing 27	Antimicrobials
<i>RELA</i>	RELA proto-oncogene, NF-kB subunit	Antimicrobials
<i>IL7R</i>	interleukin 7 receptor	Antimicrobials
<i>IL1A</i>	interleukin 1 alpha	Antimicrobials
<i>PTX3</i>	pentraxin 3	Antimicrobials
<i>IFNAR2</i>	interferon alpha and beta receptor subunit 2	Antimicrobials
<i>IFN1@</i>	-	Antimicrobials
<i>SYTL1</i>	synaptotagmin like 1	Antimicrobials
<i>APOBEC3C</i>	apolipoprotein B mRNA editing enzyme catalytic subunit 3C	Antimicrobials
<i>DDX17</i>	DEAD-box helicase 17	Antimicrobials
<i>PTGS2</i>	prostaglandin-endoperoxide synthase 2	Antimicrobials
<i>HTR1A</i>	5-hydroxytryptamine receptor 1A	Antimicrobials
<i>SEPTIN7</i>	septin 7	Antimicrobials
<i>CD40LG</i>	CD40 ligand	Antimicrobials
<i>CD14</i>	CD14 molecule	Antimicrobials
<i>CD8A</i>	CD8a molecule	Antimicrobials
<i>CD4</i>	CD4 molecule	Antimicrobials
<i>MASP1</i>	mannan binding lectin serine peptidase 1	Antimicrobials
<i>PROC</i>	protein C, inactivator of coagulation factors Va and VIIIa	Antimicrobials
<i>MAP2K2</i>	mitogen-activated protein kinase kinase 2	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>MAP2K1</i>	mitogen-activated protein kinase kinase 1	Antimicrobials
<i>HRG</i>	histidine rich glycoprotein	Antimicrobials
<i>NDRG1</i>	N-myc downstream regulated 1	Antimicrobials
<i>IRF9</i>	interferon regulatory factor 9	Antimicrobials
<i>TRIM22</i>	tripartite motif containing 22	Antimicrobials
<i>LANCL1</i>	LanC like 1	Antimicrobials
<i>PPP4C</i>	protein phosphatase 4 catalytic subunit	Antimicrobials
<i>HMOX1</i>	heme oxygenase 1	Antimicrobials
<i>HMGB1</i>	high mobility group box 1	Antimicrobials
<i>HLA-B</i>	major histocompatibility complex, class I, B	Antimicrobials
<i>RNASE7</i>	ribonuclease A family member 7	Antimicrobials
<i>ABCC4</i>	ATP binding cassette subfamily C member 4	Antimicrobials
<i>HGF</i>	hepatocyte growth factor	Antimicrobials
<i>HDAC1</i>	histone deacetylase 1	Antimicrobials
<i>IFNLR1</i>	interferon lambda receptor 1	Antimicrobials
<i>PLSCR1</i>	phospholipid scramblase 1	Antimicrobials
<i>B2M</i>	beta-2-microglobulin	Antimicrobials
<i>BACH2</i>	BTB domain and CNC homolog 2	Antimicrobials
<i>TANK</i>	TRAF family member associated NFKB activator	Antimicrobials
<i>PIK3CG</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	Antimicrobials
<i>ARRB1</i>	arrestin beta 1	Antimicrobials
<i>RSAD2</i>	radical S-adenosyl methionine domain containing 2	Antimicrobials
<i>STAB2</i>	stabilin 2	Antimicrobials
<i>TBK1</i>	TANK binding kinase 1	Antimicrobials
<i>PDYN</i>	prodynorphin	Antimicrobials
<i>PDGFRB</i>	platelet derived growth factor receptor beta	Antimicrobials
<i>PDCD1</i>	programmed cell death 1	Antimicrobials
<i>PCSK2</i>	proprotein convertase subtilisin/kexin type 2	Antimicrobials
<i>PCSK1</i>	proprotein convertase subtilisin/kexin type 1	Antimicrobials
<i>ARG2</i>	arginase 2	Antimicrobials
<i>AQP9</i>	aquaporin 9	Antimicrobials
<i>FASLG</i>	Fas ligand	Antimicrobials
<i>APOH</i>	apolipoprotein H	Antimicrobials
<i>BIRC5</i>	baculoviral IAP repeat containing 5	Antimicrobials
<i>ANXA6</i>	annexin A6	Antimicrobials
<i>IL22</i>	interleukin 22	Antimicrobials
<i>VTN</i>	vitronectin	Antimicrobials
<i>VIM</i>	vimentin	Antimicrobials
<i>VCAM1</i>	vascular cell adhesion molecule 1	Antimicrobials
<i>PRDX1</i>	peroxiredoxin 1	Antimicrobials
<i>GFAP</i>	glial fibrillary acidic protein	Antimicrobials
<i>GBP2</i>	guanylate binding protein 2	Antimicrobials
<i>ALB</i>	albumin	Antimicrobials
<i>SLC29A3</i>	solute carrier family 29 member 3	Antimicrobials
<i>OAS1</i>	2'-5'-oligoadenylate synthetase 1	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>AGER</i>	advanced glycosylation end-product specific receptor	Antimicrobials
<i>UNC93B1</i>	unc-93 homolog B1, TLR signaling regulator	Antimicrobials
<i>TNFSF4</i>	TNF superfamily member 4	Antimicrobials
<i>NOS1</i>	nitric oxide synthase 1	Antimicrobials
<i>ACTG1</i>	actin gamma 1	Antimicrobials
<i>ACTA1</i>	actin alpha 1, skeletal muscle	Antimicrobials
<i>ACO1</i>	aconitase 1	Antimicrobials
<i>SERPINA3</i>	serpin family A member 3	Antimicrobials
<i>CXCR1</i>	C-X-C motif chemokine receptor 1	Antimicrobials
<i>CCL15</i>	C-C motif chemokine ligand 15	Antimicrobials
<i>CCL14</i>	C-C motif chemokine ligand 14	Antimicrobials
<i>CCL4</i>	C-C motif chemokine ligand 4	Antimicrobials
<i>CCL16</i>	C-C motif chemokine ligand 16	Antimicrobials
<i>CCL19</i>	C-C motif chemokine ligand 19	Antimicrobials
<i>CCL13</i>	C-C motif chemokine ligand 13	Antimicrobials
<i>CCL18</i>	C-C motif chemokine ligand 18	Antimicrobials
<i>CCL17</i>	C-C motif chemokine ligand 17	Antimicrobials
<i>CCL26</i>	C-C motif chemokine ligand 26	Antimicrobials
<i>CCL22</i>	C-C motif chemokine ligand 22	Antimicrobials
<i>CCR3</i>	C-C motif chemokine receptor 3	Antimicrobials
<i>CCL28</i>	C-C motif chemokine ligand 28	Antimicrobials
<i>CCL4L1</i>	C-C motif chemokine ligand 4 like 1	Antimicrobials
<i>ACKR2</i>	atypical chemokine receptor 2	Antimicrobials
<i>CCR7</i>	C-C motif chemokine receptor 7	Antimicrobials
<i>CCL27</i>	C-C motif chemokine ligand 27	Antimicrobials
<i>CCR8</i>	C-C motif chemokine receptor 8	Antimicrobials
<i>ACKR4</i>	atypical chemokine receptor 4	Antimicrobials
<i>CCR10</i>	C-C motif chemokine receptor 10	Antimicrobials
<i>CCL2</i>	C-C motif chemokine ligand 2	Antimicrobials
<i>CCL21</i>	C-C motif chemokine ligand 21	Antimicrobials
<i>CCL7</i>	C-C motif chemokine ligand 7	Antimicrobials
<i>CCL5</i>	C-C motif chemokine ligand 5	Antimicrobials
<i>CCL3</i>	C-C motif chemokine ligand 3	Antimicrobials
<i>CCL20</i>	C-C motif chemokine ligand 20	Antimicrobials
<i>CCL11</i>	C-C motif chemokine ligand 11	Antimicrobials
<i>CCR5</i>	C-C motif chemokine receptor 5	Antimicrobials
<i>CCL23</i>	C-C motif chemokine ligand 23	Antimicrobials
<i>CCL25</i>	C-C motif chemokine ligand 25	Antimicrobials
<i>CCL1</i>	C-C motif chemokine ligand 1	Antimicrobials
<i>CCL3L3</i>	C-C motif chemokine ligand 3 like 3	Antimicrobials
<i>CCL4L2</i>	C-C motif chemokine ligand 4 like 2	Antimicrobials
<i>CXCL12</i>	C-X-C motif chemokine ligand 12	Antimicrobials
<i>XCL1</i>	X-C motif chemokine ligand 1	Antimicrobials
<i>CCL8</i>	C-C motif chemokine ligand 8	Antimicrobials
<i>CCL3L1</i>	C-C motif chemokine ligand 3 like 1	Antimicrobials
<i>CCR1</i>	C-C motif chemokine receptor 1	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>CCL24</i>	C-C motif chemokine ligand 24	Antimicrobials
<i>XCL2</i>	X-C motif chemokine ligand 2	Antimicrobials
<i>CXCL1</i>	C-X-C motif chemokine ligand 1	Antimicrobials
<i>CXCL10</i>	C-X-C motif chemokine ligand 10	Antimicrobials
<i>CXCR4</i>	C-X-C motif chemokine receptor 4	Antimicrobials
<i>CXCL2</i>	C-X-C motif chemokine ligand 2	Antimicrobials
<i>CXCR6</i>	C-X-C motif chemokine receptor 6	Antimicrobials
<i>CCR4</i>	C-C motif chemokine receptor 4	Antimicrobials
<i>CXCL11</i>	C-X-C motif chemokine ligand 11	Antimicrobials
<i>TAFA5</i>	TAFA chemokine like family member 5	Antimicrobials
<i>TAFA3</i>	TAFA chemokine like family member 3	Antimicrobials
<i>TAFA4</i>	TAFA chemokine like family member 4	Antimicrobials
<i>TAFA1</i>	TAFA chemokine like family member 1	Antimicrobials
<i>TAFA2</i>	TAFA chemokine like family member 2	Antimicrobials
<i>CCL15-CCL14</i>	CCL15-CCL14 readthrough (NMD candidate)	Antimicrobials
<i>IL6</i>	interleukin 6	Antimicrobials
<i>TNF</i>	tumor necrosis factor	Antimicrobials
<i>IL1B</i>	interleukin 1 beta	Antimicrobials
<i>IL18</i>	interleukin 18	Antimicrobials
<i>PTK2B</i>	protein tyrosine kinase 2 beta	Antimicrobials
<i>VEGFA</i>	vascular endothelial growth factor A	Antimicrobials
<i>IL4</i>	interleukin 4	Antimicrobials
<i>CDH1</i>	cadherin 1	Antimicrobials
<i>CD40</i>	CD40 molecule	Antimicrobials
<i>DEFB103B</i>	defensin beta 103B	Antimicrobials
<i>F2RL1</i>	F2R like trypsin receptor 1	Antimicrobials
<i>MMP9</i>	matrix metalloproteinase 9	Antimicrobials
<i>LTBP1</i>	latent transforming growth factor beta binding protein 1	Antimicrobials
<i>DEFB4A</i>	defensin beta 4A	Antimicrobials
<i>TNFSF10</i>	TNF superfamily member 10	Antimicrobials
<i>IL13</i>	interleukin 13	Antimicrobials
<i>IL10</i>	interleukin 10	Antimicrobials
<i>IL2</i>	interleukin 2	Antimicrobials
<i>PPARG</i>	peroxisome proliferator activated receptor gamma	Antimicrobials
<i>FGR</i>	FGR proto-oncogene, Src family tyrosine kinase	Antimicrobials
<i>MIF</i>	macrophage migration inhibitory factor	Antimicrobials
<i>CRP</i>	C-reactive protein	Antimicrobials
<i>JAK2</i>	Janus kinase 2	Antimicrobials
<i>IL1A</i>	interleukin 1 alpha	Antimicrobials
<i>PTK2</i>	protein tyrosine kinase 2	Antimicrobials
<i>PTGDR</i>	prostaglandin D2 receptor	Antimicrobials
<i>CD86</i>	CD86 molecule	Antimicrobials
<i>HCK</i>	HCK proto-oncogene, Src family tyrosine kinase	Antimicrobials
<i>ARRB1</i>	arrestin beta 1	Antimicrobials
<i>GNAI1</i>	G protein subunit alpha i1	Antimicrobials
<i>VDR</i>	vitamin D receptor	Antimicrobials

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>OLR1</i>	oxidized low density lipoprotein receptor 1	Antimicrobials
<i>GRK2</i>	G protein-coupled receptor kinase 2	Antimicrobials
<i>TXK</i>	TXK tyrosine kinase	Antimicrobials
<i>RNASE2</i>	ribonuclease A family member 2	Antimicrobials
<i>CD79A</i>	CD79a molecule	BCRSignalingPathway
<i>CD79B</i>	CD79b molecule	BCRSignalingPathway
<i>LYN</i>	LYN proto-oncogene, Src family tyrosine kinase	BCRSignalingPathway
<i>SYK</i>	spleen associated tyrosine kinase	BCRSignalingPathway
<i>BTK</i>	Bruton tyrosine kinase	BCRSignalingPathway
<i>BLNK</i>	B cell linker	BCRSignalingPathway
<i>VAV3</i>	vav guanine nucleotide exchange factor 3	BCRSignalingPathway
<i>VAV1</i>	vav guanine nucleotide exchange factor 1	BCRSignalingPathway
<i>VAV2</i>	vav guanine nucleotide exchange factor 2	BCRSignalingPathway
<i>RAC1</i>	Rac family small GTPase 1	BCRSignalingPathway
<i>RAC2</i>	Rac family small GTPase 2	BCRSignalingPathway
<i>RAC3</i>	Rac family small GTPase 3	BCRSignalingPathway
<i>PPP3CA</i>	protein phosphatase 3 catalytic subunit alpha	BCRSignalingPathway
<i>PPP3CB</i>	protein phosphatase 3 catalytic subunit beta	BCRSignalingPathway
<i>PPP3CC</i>	protein phosphatase 3 catalytic subunit gamma	BCRSignalingPathway
<i>CHP1</i>	calcineurin like EF-hand protein 1	BCRSignalingPathway
<i>PPP3R1</i>	protein phosphatase 3 regulatory subunit B, alpha	BCRSignalingPathway
<i>PPP3R2</i>	protein phosphatase 3 regulatory subunit B, beta	BCRSignalingPathway
<i>CHP2</i>	calcineurin like EF-hand protein 2	BCRSignalingPathway
<i>NFAT5</i>	nuclear factor of activated T cells 5	BCRSignalingPathway
<i>NFATC1</i>	nuclear factor of activated T cells 1	BCRSignalingPathway
<i>NFATC2</i>	nuclear factor of activated T cells 2	BCRSignalingPathway
<i>NFATC3</i>	nuclear factor of activated T cells 3	BCRSignalingPathway
<i>NFATC4</i>	nuclear factor of activated T cells 4	BCRSignalingPathway
<i>HRAS</i>	HRas proto-oncogene, GTPase	BCRSignalingPathway
<i>KRAS</i>	KRAS proto-oncogene, GTPase	BCRSignalingPathway
<i>NRAS</i>	NRAS proto-oncogene, GTPase	BCRSignalingPathway
<i>FOS</i>	Fos proto-oncogene, AP-1 transcription factor subunit	BCRSignalingPathway
<i>JUN</i>	Jun proto-oncogene, AP-1 transcription factor subunit	BCRSignalingPathway
<i>CARD11</i>	caspase recruitment domain family member 11	BCRSignalingPathway
<i>BCL10</i>	BCL10 immune signaling adaptor	BCRSignalingPathway
<i>MALT1</i>	MALT1 paracaspase	BCRSignalingPathway
<i>CHUK</i>	component of inhibitor of nuclear factor kappa B kinase complex	BCRSignalingPathway
<i>IKBKB</i>	inhibitor of nuclear factor kappa B kinase subunit beta	BCRSignalingPathway
<i>IKBKG</i>	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	BCRSignalingPathway
<i>NFKB1</i>	nuclear factor kappa B subunit 1	BCRSignalingPathway
<i>RELA</i>	RELA proto-oncogene, NF-kB subunit	BCRSignalingPathway
<i>NFKBIA</i>	NFKB inhibitor alpha	BCRSignalingPathway
<i>NFKBIB</i>	NFKB inhibitor beta	BCRSignalingPathway
<i>NFKBIE</i>	NFKB inhibitor epsilon	BCRSignalingPathway
<i>CD81</i>	CD81 molecule	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>CD19</i>	CD19 molecule	BCRSignalingPathway
<i>CR2</i>	complement C3d receptor 2	BCRSignalingPathway
<i>PIK3R5</i>	phosphoinositide-3-kinase regulatory subunit 5	BCRSignalingPathway
<i>PIK3R1</i>	phosphoinositide-3-kinase regulatory subunit 1	BCRSignalingPathway
<i>PIK3R2</i>	phosphoinositide-3-kinase regulatory subunit 2	BCRSignalingPathway
<i>PIK3R3</i>	phosphoinositide-3-kinase regulatory subunit 3	BCRSignalingPathway
<i>PIK3CA</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	BCRSignalingPathway
<i>PIK3CB</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	BCRSignalingPathway
<i>PIK3CD</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	BCRSignalingPathway
<i>PIK3CG</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	BCRSignalingPathway
<i>AKT3</i>	AKT serine/threonine kinase 3	BCRSignalingPathway
<i>AKT1</i>	AKT serine/threonine kinase 1	BCRSignalingPathway
<i>AKT2</i>	AKT serine/threonine kinase 2	BCRSignalingPathway
<i>GSK3B</i>	glycogen synthase kinase 3 beta	BCRSignalingPathway
<i>INPP5D</i>	inositol polyphosphate-5-phosphatase D	BCRSignalingPathway
<i>CD22</i>	CD22 molecule	BCRSignalingPathway
<i>CD72</i>	CD72 molecule	BCRSignalingPathway
<i>PTPN6</i>	protein tyrosine phosphatase non-receptor type 6	BCRSignalingPathway
<i>LILRB3</i>	leukocyte immunoglobulin like receptor B3	BCRSignalingPathway
<i>FCGR2B</i>	Fc fragment of IgG receptor IIb	BCRSignalingPathway
<i>RASGRP3</i>	RAS guanyl releasing protein 3	BCRSignalingPathway
<i>PLCG2</i>	phospholipase C gamma 2	BCRSignalingPathway
<i>PRKCB</i>	protein kinase C beta	BCRSignalingPathway
<i>IFITM1</i>	interferon induced transmembrane protein 1	BCRSignalingPathway
<i>IGH</i>	immunoglobulin heavy locus	BCRSignalingPathway
<i>IGHA1</i>	immunoglobulin heavy constant alpha 1	BCRSignalingPathway
<i>IGHA2</i>	immunoglobulin heavy constant alpha 2 (A2m marker)	BCRSignalingPathway
<i>IGHD</i>	immunoglobulin heavy constant delta	BCRSignalingPathway
<i>IGHD1-1</i>	immunoglobulin heavy diversity 1-1	BCRSignalingPathway
<i>IGHD1-14</i>	immunoglobulin heavy diversity 1-14 (non-functional)	BCRSignalingPathway
<i>IGHD1-20</i>	immunoglobulin heavy diversity 1-20	BCRSignalingPathway
<i>IGHD1-26</i>	immunoglobulin heavy diversity 1-26	BCRSignalingPathway
<i>IGHD1-7</i>	immunoglobulin heavy diversity 1-7	BCRSignalingPathway
<i>IGHD2-15</i>	immunoglobulin heavy diversity 2-15	BCRSignalingPathway
<i>IGHD2-2</i>	immunoglobulin heavy diversity 2-2	BCRSignalingPathway
<i>IGHD2-21</i>	immunoglobulin heavy diversity 2-21	BCRSignalingPathway
<i>IGHD2-8</i>	immunoglobulin heavy diversity 2-8	BCRSignalingPathway
<i>IGHD3-10</i>	immunoglobulin heavy diversity 3-10	BCRSignalingPathway
<i>IGHD3-16</i>	immunoglobulin heavy diversity 3-16	BCRSignalingPathway
<i>IGHD3-22</i>	immunoglobulin heavy diversity 3-22	BCRSignalingPathway
<i>IGHD3-3</i>	immunoglobulin heavy diversity 3-3	BCRSignalingPathway
<i>IGHD3-9</i>	immunoglobulin heavy diversity 3-9	BCRSignalingPathway
<i>IGHD4-11</i>	immunoglobulin heavy diversity 4-11 (non-functional)	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IGHD4-17</i>	immunoglobulin heavy diversity 4-17	BCRSignalingPathway
<i>IGHD4-23</i>	immunoglobulin heavy diversity 4-23 (non-functional)	BCRSignalingPathway
<i>IGHD4-4</i>	immunoglobulin heavy diversity 4-4	BCRSignalingPathway
<i>IGHD5-12</i>	immunoglobulin heavy diversity 5-12	BCRSignalingPathway
<i>IGHD5-18</i>	immunoglobulin heavy diversity 5-18	BCRSignalingPathway
<i>IGHD5-24</i>	immunoglobulin heavy diversity 5-24 (non-functional)	BCRSignalingPathway
<i>IGHD5-5</i>	immunoglobulin heavy diversity 5-5	BCRSignalingPathway
<i>IGHD6-13</i>	immunoglobulin heavy diversity 6-13	BCRSignalingPathway
<i>IGHD6-19</i>	immunoglobulin heavy diversity 6-19	BCRSignalingPathway
<i>IGHD6-25</i>	immunoglobulin heavy diversity 6-25	BCRSignalingPathway
<i>IGHD6-6</i>	immunoglobulin heavy diversity 6-6	BCRSignalingPathway
<i>IGHD7-27</i>	immunoglobulin heavy diversity 7-27	BCRSignalingPathway
<i>IGHE</i>	immunoglobulin heavy constant epsilon	BCRSignalingPathway
<i>IGHG1</i>	immunoglobulin heavy constant gamma 1 (G1m marker)	BCRSignalingPathway
<i>IGHG2</i>	immunoglobulin heavy constant gamma 2 (G2m marker)	BCRSignalingPathway
<i>IGHG3</i>	immunoglobulin heavy constant gamma 3 (G3m marker)	BCRSignalingPathway
<i>IGHG4</i>	immunoglobulin heavy constant gamma 4 (G4m marker)	BCRSignalingPathway
<i>IGHJ1</i>	immunoglobulin heavy joining 1	BCRSignalingPathway
<i>IGHJ2</i>	immunoglobulin heavy joining 2	BCRSignalingPathway
<i>IGHJ3</i>	immunoglobulin heavy joining 3	BCRSignalingPathway
<i>IGHJ4</i>	immunoglobulin heavy joining 4	BCRSignalingPathway
<i>IGHJ5</i>	immunoglobulin heavy joining 5	BCRSignalingPathway
<i>IGHJ6</i>	immunoglobulin heavy joining 6	BCRSignalingPathway
<i>IGHM</i>	immunoglobulin heavy constant mu	BCRSignalingPathway
<i>IGH</i>	immunoglobulin heavy locus	BCRSignalingPathway
<i>IGHV1-18</i>	immunoglobulin heavy variable 1-18	BCRSignalingPathway
<i>IGHV1-2</i>	immunoglobulin heavy variable 1-2	BCRSignalingPathway
<i>IGHV1-24</i>	immunoglobulin heavy variable 1-24	BCRSignalingPathway
<i>IGHV1-3</i>	immunoglobulin heavy variable 1-3	BCRSignalingPathway
<i>IGHV1-45</i>	immunoglobulin heavy variable 1-45	BCRSignalingPathway
<i>IGHV1-46</i>	immunoglobulin heavy variable 1-46	BCRSignalingPathway
<i>IGHV1-58</i>	immunoglobulin heavy variable 1-58	BCRSignalingPathway
<i>IGHV1-69</i>	immunoglobulin heavy variable 1-69	BCRSignalingPathway
<i>IGHV1-8</i>	immunoglobulin heavy variable 1-8	BCRSignalingPathway
<i>IGHV1-38-4</i>	immunoglobulin heavy variable 1-38-4 (non-functional)	BCRSignalingPathway
<i>IGHV1-69-2</i>	immunoglobulin heavy variable 1-69-2	BCRSignalingPathway
<i>IGHV2-26</i>	immunoglobulin heavy variable 2-26	BCRSignalingPathway
<i>IGHV2-5</i>	immunoglobulin heavy variable 2-5	BCRSignalingPathway
<i>IGHV2-70</i>	immunoglobulin heavy variable 2-70	BCRSignalingPathway
<i>IGHV3-11</i>	immunoglobulin heavy variable 3-11	BCRSignalingPathway
<i>IGHV3-13</i>	immunoglobulin heavy variable 3-13	BCRSignalingPathway
<i>IGHV3-15</i>	immunoglobulin heavy variable 3-15	BCRSignalingPathway
<i>IGHV3-16</i>	immunoglobulin heavy variable 3-16 (non-functional)	BCRSignalingPathway
<i>IGHV3-20</i>	immunoglobulin heavy variable 3-20	BCRSignalingPathway
<i>IGHV3-21</i>	immunoglobulin heavy variable 3-21	BCRSignalingPathway
<i>IGHV3-23</i>	immunoglobulin heavy variable 3-23	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IGHV3-30</i>	immunoglobulin heavy variable 3-30	BCRSignalingPathway
<i>IGHV3-30-3</i>	immunoglobulin heavy variable 3-30-3	BCRSignalingPathway
<i>IGHV3-30-5</i>	immunoglobulin heavy variable 3-30-5	BCRSignalingPathway
<i>IGHV3-33</i>	immunoglobulin heavy variable 3-33	BCRSignalingPathway
<i>IGHV3-35</i>	immunoglobulin heavy variable 3-35 (non-functional)	BCRSignalingPathway
<i>IGHV3-38</i>	immunoglobulin heavy variable 3-38 (non-functional)	BCRSignalingPathway
<i>IGHV3-43</i>	immunoglobulin heavy variable 3-43	BCRSignalingPathway
<i>IGHV3-48</i>	immunoglobulin heavy variable 3-48	BCRSignalingPathway
<i>IGHV3-49</i>	immunoglobulin heavy variable 3-49	BCRSignalingPathway
<i>IGHV3-53</i>	immunoglobulin heavy variable 3-53	BCRSignalingPathway
<i>IGHV3-64</i>	immunoglobulin heavy variable 3-64	BCRSignalingPathway
<i>IGHV3-66</i>	immunoglobulin heavy variable 3-66	BCRSignalingPathway
<i>IGHV3-7</i>	immunoglobulin heavy variable 3-7	BCRSignalingPathway
<i>IGHV3-72</i>	immunoglobulin heavy variable 3-72	BCRSignalingPathway
<i>IGHV3-73</i>	immunoglobulin heavy variable 3-73	BCRSignalingPathway
<i>IGHV3-74</i>	immunoglobulin heavy variable 3-74	BCRSignalingPathway
<i>IGHV3-9</i>	immunoglobulin heavy variable 3-9	BCRSignalingPathway
<i>IGHV3-38-3</i>	immunoglobulin heavy variable 3-38-3 (non-functional)	BCRSignalingPathway
<i>IGHV3-69-1</i>	immunoglobulin heavy variable 3-69-1 (pseudogene)	BCRSignalingPathway
<i>IGHV4-28</i>	immunoglobulin heavy variable 4-28	BCRSignalingPathway
<i>IGHV4-30-1</i>	immunoglobulin heavy variable 4-30-1	BCRSignalingPathway
<i>IGHV4-30-2</i>	immunoglobulin heavy variable 4-30-2	BCRSignalingPathway
<i>IGHV4-30-4</i>	immunoglobulin heavy variable 4-30-4	BCRSignalingPathway
<i>IGHV4-31</i>	immunoglobulin heavy variable 4-31	BCRSignalingPathway
<i>IGHV4-34</i>	immunoglobulin heavy variable 4-34	BCRSignalingPathway
<i>IGHV4-39</i>	immunoglobulin heavy variable 4-39	BCRSignalingPathway
<i>IGHV4-4</i>	immunoglobulin heavy variable 4-4	BCRSignalingPathway
<i>IGHV4-59</i>	immunoglobulin heavy variable 4-59	BCRSignalingPathway
<i>IGHV4-61</i>	immunoglobulin heavy variable 4-61	BCRSignalingPathway
<i>IGHV4-38-2</i>	immunoglobulin heavy variable 4-38-2	BCRSignalingPathway
<i>IGHV5-51</i>	immunoglobulin heavy variable 5-51	BCRSignalingPathway
<i>IGHV5-10-1</i>	immunoglobulin heavy variable 5-10-1	BCRSignalingPathway
<i>IGHV6-1</i>	immunoglobulin heavy variable 6-1	BCRSignalingPathway
<i>IGHV7-4-1</i>	immunoglobulin heavy variable 7-4-1	BCRSignalingPathway
<i>IGHV7-81</i>	immunoglobulin heavy variable 7-81 (non-functional)	BCRSignalingPathway
<i>IGK</i>	immunoglobulin kappa locus	BCRSignalingPathway
<i>IGKC</i>	immunoglobulin kappa constant	BCRSignalingPathway
<i>IGKDEL</i>	immunoglobulin kappa deleting element or like	BCRSignalingPathway
<i>IGKJ</i>	-	BCRSignalingPathway
<i>IGKJ1</i>	immunoglobulin kappa joining 1	BCRSignalingPathway
<i>IGKJ2</i>	immunoglobulin kappa joining 2	BCRSignalingPathway
<i>IGKJ3</i>	immunoglobulin kappa joining 3	BCRSignalingPathway
<i>IGKJ4</i>	immunoglobulin kappa joining 4	BCRSignalingPathway
<i>IGKJ5</i>	immunoglobulin kappa joining 5	BCRSignalingPathway
<i>IGKV@</i>	-	BCRSignalingPathway
<i>IGKV1-12</i>	immunoglobulin kappa variable 1-12	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IGKV1-13</i>	immunoglobulin kappa variable 1-13	BCRSignalingPathway
<i>IGKV1-16</i>	immunoglobulin kappa variable 1-16	BCRSignalingPathway
<i>IGKV1-17</i>	immunoglobulin kappa variable 1-17	BCRSignalingPathway
<i>IGKV1-27</i>	immunoglobulin kappa variable 1-27	BCRSignalingPathway
<i>IGKV1-33</i>	immunoglobulin kappa variable 1-33	BCRSignalingPathway
<i>IGKV1-37</i>	immunoglobulin kappa variable 1-37 (non-functional)	BCRSignalingPathway
<i>IGKV1-39</i>	immunoglobulin kappa variable 1-39	BCRSignalingPathway
<i>IGKV1-5</i>	immunoglobulin kappa variable 1-5	BCRSignalingPathway
<i>IGKV1-6</i>	immunoglobulin kappa variable 1-6	BCRSignalingPathway
<i>IGKV1-8</i>	immunoglobulin kappa variable 1-8	BCRSignalingPathway
<i>IGKV1-9</i>	immunoglobulin kappa variable 1-9	BCRSignalingPathway
<i>IGKV1D-12</i>	immunoglobulin kappa variable 1D-12	BCRSignalingPathway
<i>IGKV1D-13</i>	immunoglobulin kappa variable 1D-13	BCRSignalingPathway
<i>IGKV1D-16</i>	immunoglobulin kappa variable 1D-16	BCRSignalingPathway
<i>IGKV1D-17</i>	immunoglobulin kappa variable 1D-17	BCRSignalingPathway
<i>IGKV1D-33</i>	immunoglobulin kappa variable 1D-33	BCRSignalingPathway
<i>IGKV1D-37</i>	immunoglobulin kappa variable 1D-37 (non-functional)	BCRSignalingPathway
<i>IGKV1D-39</i>	immunoglobulin kappa variable 1D-39	BCRSignalingPathway
<i>IGKV1D-42</i>	immunoglobulin kappa variable 1D-42 (non-functional)	BCRSignalingPathway
<i>IGKV1D-43</i>	immunoglobulin kappa variable 1D-43	BCRSignalingPathway
<i>IGKV1D-8</i>	immunoglobulin kappa variable 1D-8	BCRSignalingPathway
<i>IGKV2-24</i>	immunoglobulin kappa variable 2-24	BCRSignalingPathway
<i>IGKV2-28</i>	immunoglobulin kappa variable 2-28	BCRSignalingPathway
<i>IGKV2-30</i>	immunoglobulin kappa variable 2-30	BCRSignalingPathway
<i>IGKV2-40</i>	immunoglobulin kappa variable 2-40	BCRSignalingPathway
<i>IGKV2D-24</i>	immunoglobulin kappa variable 2D-24 (non-functional)	BCRSignalingPathway
<i>IGKV2D-28</i>	immunoglobulin kappa variable 2D-28	BCRSignalingPathway
<i>IGKV2D-29</i>	immunoglobulin kappa variable 2D-29	BCRSignalingPathway
<i>IGKV2D-30</i>	immunoglobulin kappa variable 2D-30	BCRSignalingPathway
<i>IGKV2D-40</i>	immunoglobulin kappa variable 2D-40	BCRSignalingPathway
<i>IGKV3-11</i>	immunoglobulin kappa variable 3-11	BCRSignalingPathway
<i>IGKV3-15</i>	immunoglobulin kappa variable 3-15	BCRSignalingPathway
<i>IGKV3-20</i>	immunoglobulin kappa variable 3-20	BCRSignalingPathway
<i>IGKV3-7</i>	immunoglobulin kappa variable 3-7 (non-functional)	BCRSignalingPathway
<i>IGKV3D-11</i>	immunoglobulin kappa variable 3D-11	BCRSignalingPathway
<i>IGKV3D-15</i>	immunoglobulin kappa variable 3D-15	BCRSignalingPathway
<i>IGKV3D-20</i>	immunoglobulin kappa variable 3D-20	BCRSignalingPathway
<i>IGKV3D-7</i>	immunoglobulin kappa variable 3D-7	BCRSignalingPathway
<i>IGKV4-1</i>	immunoglobulin kappa variable 4-1	BCRSignalingPathway
<i>IGKV5-2</i>	immunoglobulin kappa variable 5-2	BCRSignalingPathway
<i>IGKV6-21</i>	immunoglobulin kappa variable 6-21 (non-functional)	BCRSignalingPathway
<i>IGKV6D-21</i>	immunoglobulin kappa variable 6D-21 (non-functional)	BCRSignalingPathway
<i>IGKV6D-41</i>	immunoglobulin kappa variable 6D-41 (non-functional)	BCRSignalingPathway
<i>IGL</i>	immunoglobulin lambda locus	BCRSignalingPathway
<i>IGLC1</i>	immunoglobulin lambda constant 1	BCRSignalingPathway
<i>IGLC2</i>	immunoglobulin lambda constant 2	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IGLC3</i>	immunoglobulin lambda constant 3 (Kern-Oz+ marker)	BCRSignalingPathway
<i>IGLC6</i>	immunoglobulin lambda constant 6	BCRSignalingPathway
<i>IGLC7</i>	immunoglobulin lambda constant 7	BCRSignalingPathway
<i>IGLJ</i>	-	BCRSignalingPathway
<i>IGLJ1</i>	immunoglobulin lambda joining 1	BCRSignalingPathway
<i>IGLJ2</i>	immunoglobulin lambda joining 2	BCRSignalingPathway
<i>IGLJ3</i>	immunoglobulin lambda joining 3	BCRSignalingPathway
<i>IGLJ4</i>	immunoglobulin lambda joining 4 (non-functional)	BCRSignalingPathway
<i>IGLJ5</i>	immunoglobulin lambda joining 5 (non-functional)	BCRSignalingPathway
<i>IGLJ6</i>	immunoglobulin lambda joining 6	BCRSignalingPathway
<i>IGLJ7</i>	immunoglobulin lambda joining 7	BCRSignalingPathway
<i>IGLV@</i>	-	BCRSignalingPathway
<i>IGLV1-36</i>	immunoglobulin lambda variable 1-36	BCRSignalingPathway
<i>IGLV1-40</i>	immunoglobulin lambda variable 1-40	BCRSignalingPathway
<i>IGLV1-44</i>	immunoglobulin lambda variable 1-44	BCRSignalingPathway
<i>IGLV1-47</i>	immunoglobulin lambda variable 1-47	BCRSignalingPathway
<i>IGLV1-50</i>	immunoglobulin lambda variable 1-50 (non-functional)	BCRSignalingPathway
<i>IGLV1-51</i>	immunoglobulin lambda variable 1-51	BCRSignalingPathway
<i>IGLV10-54</i>	immunoglobulin lambda variable 10-54	BCRSignalingPathway
<i>IGLV11-55</i>	immunoglobulin lambda variable 11-55 (non-functional)	BCRSignalingPathway
<i>IGLV2-11</i>	immunoglobulin lambda variable 2-11	BCRSignalingPathway
<i>IGLV2-14</i>	immunoglobulin lambda variable 2-14	BCRSignalingPathway
<i>IGLV2-18</i>	immunoglobulin lambda variable 2-18	BCRSignalingPathway
<i>IGLV2-23</i>	immunoglobulin lambda variable 2-23	BCRSignalingPathway
<i>IGLV2-33</i>	immunoglobulin lambda variable 2-33 (non-functional)	BCRSignalingPathway
<i>IGLV2-8</i>	immunoglobulin lambda variable 2-8	BCRSignalingPathway
<i>IGLV3-1</i>	immunoglobulin lambda variable 3-1	BCRSignalingPathway
<i>IGLV3-10</i>	immunoglobulin lambda variable 3-10	BCRSignalingPathway
<i>IGLV3-12</i>	immunoglobulin lambda variable 3-12	BCRSignalingPathway
<i>IGLV3-16</i>	immunoglobulin lambda variable 3-16	BCRSignalingPathway
<i>IGLV3-19</i>	immunoglobulin lambda variable 3-19	BCRSignalingPathway
<i>IGLV3-21</i>	immunoglobulin lambda variable 3-21	BCRSignalingPathway
<i>IGLV3-22</i>	immunoglobulin lambda variable 3-22	BCRSignalingPathway
<i>IGLV3-25</i>	immunoglobulin lambda variable 3-25	BCRSignalingPathway
<i>IGLV3-27</i>	immunoglobulin lambda variable 3-27	BCRSignalingPathway
<i>IGLV3-32</i>	immunoglobulin lambda variable 3-32 (non-functional)	BCRSignalingPathway
<i>IGLV3-9</i>	immunoglobulin lambda variable 3-9	BCRSignalingPathway
<i>IGLV4-3</i>	immunoglobulin lambda variable 4-3	BCRSignalingPathway
<i>IGLV4-60</i>	immunoglobulin lambda variable 4-60	BCRSignalingPathway
<i>IGLV4-69</i>	immunoglobulin lambda variable 4-69	BCRSignalingPathway
<i>IGLV5-37</i>	immunoglobulin lambda variable 5-37	BCRSignalingPathway
<i>IGLV5-39</i>	immunoglobulin lambda variable 5-39	BCRSignalingPathway
<i>IGLV5-45</i>	immunoglobulin lambda variable 5-45	BCRSignalingPathway
<i>IGLV5-48</i>	immunoglobulin lambda variable 5-48 (non-functional)	BCRSignalingPathway
<i>IGLV5-52</i>	immunoglobulin lambda variable 5-52	BCRSignalingPathway
<i>IGLV6-57</i>	immunoglobulin lambda variable 6-57	BCRSignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IGLV7-43</i>	immunoglobulin lambda variable 7-43	BCRSignalingPathway
<i>IGLV7-46</i>	immunoglobulin lambda variable 7-46	BCRSignalingPathway
<i>IGLV8-61</i>	immunoglobulin lambda variable 8-61	BCRSignalingPathway
<i>IGLV9-49</i>	immunoglobulin lambda variable 9-49	BCRSignalingPathway
<i>C3</i>	complement C3	Chemokines
<i>C5</i>	complement C5	Chemokines
<i>CAMP</i>	cathelicidin antimicrobial peptide	Chemokines
<i>CCL1</i>	C-C motif chemokine ligand 1	Chemokines
<i>CCL11</i>	C-C motif chemokine ligand 11	Chemokines
<i>CCL13</i>	C-C motif chemokine ligand 13	Chemokines
<i>CCL14</i>	C-C motif chemokine ligand 14	Chemokines
<i>CCL15-CCL14</i>	CCL15-CCL14 readthrough (NMD candidate)	Chemokines
<i>CCL15</i>	C-C motif chemokine ligand 15	Chemokines
<i>CCL16</i>	C-C motif chemokine ligand 16	Chemokines
<i>CCL17</i>	C-C motif chemokine ligand 17	Chemokines
<i>CCL18</i>	C-C motif chemokine ligand 18	Chemokines
<i>CCL19</i>	C-C motif chemokine ligand 19	Chemokines
<i>CCL2</i>	C-C motif chemokine ligand 2	Chemokines
<i>CCL20</i>	C-C motif chemokine ligand 20	Chemokines
<i>CCL21</i>	C-C motif chemokine ligand 21	Chemokines
<i>CCL22</i>	C-C motif chemokine ligand 22	Chemokines
<i>CCL23</i>	C-C motif chemokine ligand 23	Chemokines
<i>CCL24</i>	C-C motif chemokine ligand 24	Chemokines
<i>CCL25</i>	C-C motif chemokine ligand 25	Chemokines
<i>CCL26</i>	C-C motif chemokine ligand 26	Chemokines
<i>CCL27</i>	C-C motif chemokine ligand 27	Chemokines
<i>CCL28</i>	C-C motif chemokine ligand 28	Chemokines
<i>CCL3</i>	C-C motif chemokine ligand 3	Chemokines
<i>CCL3L1</i>	C-C motif chemokine ligand 3 like 1	Chemokines
<i>CCL3P1</i>	C-C motif chemokine ligand 3 pseudogene 1	Chemokines
<i>CCL3L3</i>	C-C motif chemokine ligand 3 like 3	Chemokines
<i>CCL4</i>	C-C motif chemokine ligand 4	Chemokines
<i>CCL4L2</i>	C-C motif chemokine ligand 4 like 2	Chemokines
<i>CCL4L1</i>	C-C motif chemokine ligand 4 like 1	Chemokines
<i>CCL5</i>	C-C motif chemokine ligand 5	Chemokines
<i>CCL7</i>	C-C motif chemokine ligand 7	Chemokines
<i>CCL8</i>	C-C motif chemokine ligand 8	Chemokines
<i>CKLF</i>	chemokine like factor	Chemokines
<i>CMA1</i>	chymase 1	Chemokines
<i>CTSG</i>	cathepsin G	Chemokines
<i>CX3CL1</i>	C-X3-C motif chemokine ligand 1	Chemokines
<i>CXCL1</i>	C-X-C motif chemokine ligand 1	Chemokines
<i>CXCL10</i>	C-X-C motif chemokine ligand 10	Chemokines
<i>CXCL11</i>	C-X-C motif chemokine ligand 11	Chemokines
<i>CXCL12</i>	C-X-C motif chemokine ligand 12	Chemokines
<i>CXCL13</i>	C-X-C motif chemokine ligand 13	Chemokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>CXCL14</i>	C-X-C motif chemokine ligand 14	Chemokines
<i>CXCL16</i>	C-X-C motif chemokine ligand 16	Chemokines
<i>CXCL17</i>	C-X-C motif chemokine ligand 17	Chemokines
<i>CXCL2</i>	C-X-C motif chemokine ligand 2	Chemokines
<i>CXCL3</i>	C-X-C motif chemokine ligand 3	Chemokines
<i>CXCL5</i>	C-X-C motif chemokine ligand 5	Chemokines
<i>CXCL6</i>	C-X-C motif chemokine ligand 6	Chemokines
<i>CXCL9</i>	C-X-C motif chemokine ligand 9	Chemokines
<i>CCN1</i>	cellular communication network factor 1	Chemokines
<i>DEFA1</i>	defensin alpha 1	Chemokines
<i>DEFA3</i>	defensin alpha 3	Chemokines
<i>DEFA5</i>	defensin alpha 5	Chemokines
<i>DEFB1</i>	defensin beta 1	Chemokines
<i>DEFB103B</i>	defensin beta 103B	Chemokines
<i>DEFB104A</i>	defensin beta 104A	Chemokines
<i>DEFB4A</i>	defensin beta 4A	Chemokines
<i>EDN1</i>	endothelin 1	Chemokines
<i>EDN2</i>	endothelin 2	Chemokines
<i>EDN3</i>	endothelin 3	Chemokines
<i>FGF10</i>	fibroblast growth factor 10	Chemokines
<i>FGF2</i>	fibroblast growth factor 2	Chemokines
<i>HTN3</i>	histatin 3	Chemokines
<i>CXCL8</i>	C-X-C motif chemokine ligand 8	Chemokines
<i>LECT2</i>	leukocyte cell derived chemotaxin 2	Chemokines
<i>PF4</i>	platelet factor 4	Chemokines
<i>PF4V1</i>	platelet factor 4 variant 1	Chemokines
<i>PLAU</i>	plasminogen activator, urokinase	Chemokines
<i>PPBP</i>	pro-platelet basic protein	Chemokines
<i>PPBPP1</i>	pro-platelet basic protein pseudogene 1	Chemokines
<i>PROK2</i>	prokineticin 2	Chemokines
<i>RNASE2</i>	ribonuclease A family member 2	Chemokines
<i>SAA1</i>	serum amyloid A1	Chemokines
<i>SAA2</i>	serum amyloid A2	Chemokines
<i>SBDS</i>	SBDS ribosome maturation factor	Chemokines
<i>SEMA3A</i>	semaphorin 3A	Chemokines
<i>SEMA3B</i>	semaphorin 3B	Chemokines
<i>SEMA3C</i>	semaphorin 3C	Chemokines
<i>SEMA3D</i>	semaphorin 3D	Chemokines
<i>SEMA3E</i>	semaphorin 3E	Chemokines
<i>SEMA3F</i>	semaphorin 3F	Chemokines
<i>SEMA3G</i>	semaphorin 3G	Chemokines
<i>SEMA4A</i>	semaphorin 4A	Chemokines
<i>SEMA4B</i>	semaphorin 4B	Chemokines
<i>SEMA4C</i>	semaphorin 4C	Chemokines
<i>SEMA4D</i>	semaphorin 4D	Chemokines
<i>SEMA4F</i>	semaphorin 4F	Chemokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>SEMA4G</i>	semaphorin 4G	Chemokines
<i>SEMA5A</i>	semaphorin 5A	Chemokines
<i>SEMA5B</i>	semaphorin 5B	Chemokines
<i>SEMA6A</i>	semaphorin 6A	Chemokines
<i>SEMA6B</i>	semaphorin 6B	Chemokines
<i>SEMA6C</i>	semaphorin 6C	Chemokines
<i>SEMA6D</i>	semaphorin 6D	Chemokines
<i>SEMA7A</i>	semaphorin 7A (John Milton Hagen blood group)	Chemokines
<i>SLIT1</i>	slit guidance ligand 1	Chemokines
<i>SLIT2</i>	slit guidance ligand 2	Chemokines
<i>TNC</i>	tenascin C	Chemokines
<i>TYMP</i>	thymidine phosphorylase	Chemokines
<i>XCL1</i>	X-C motif chemokine ligand 1	Chemokines
<i>XCL2</i>	X-C motif chemokine ligand 2	Chemokines
<i>C5AR1</i>	complement C5a receptor 1	Chemokine_Receptors
<i>ACKR2</i>	atypical chemokine receptor 2	Chemokine_Receptors
<i>CCR1</i>	C-C motif chemokine receptor 1	Chemokine_Receptors
<i>CCR10</i>	C-C motif chemokine receptor 10	Chemokine_Receptors
<i>CCR3</i>	C-C motif chemokine receptor 3	Chemokine_Receptors
<i>CCR4</i>	C-C motif chemokine receptor 4	Chemokine_Receptors
<i>CCR5</i>	C-C motif chemokine receptor 5	Chemokine_Receptors
<i>CCR6</i>	C-C motif chemokine receptor 6	Chemokine_Receptors
<i>CCR7</i>	C-C motif chemokine receptor 7	Chemokine_Receptors
<i>CCR8</i>	C-C motif chemokine receptor 8	Chemokine_Receptors
<i>CCR9</i>	C-C motif chemokine receptor 9	Chemokine_Receptors
<i>ACKR4</i>	atypical chemokine receptor 4	Chemokine_Receptors
<i>CCRL2</i>	C-C motif chemokine receptor like 2	Chemokine_Receptors
<i>CMKLR1</i>	chemerin chemokine-like receptor 1	Chemokine_Receptors
<i>CX3CR1</i>	C-X3-C motif chemokine receptor 1	Chemokine_Receptors
<i>CXCR3</i>	C-X-C motif chemokine receptor 3	Chemokine_Receptors
<i>CXCR4</i>	C-X-C motif chemokine receptor 4	Chemokine_Receptors
<i>CXCR5</i>	C-X-C motif chemokine receptor 5	Chemokine_Receptors
<i>CXCR6</i>	C-X-C motif chemokine receptor 6	Chemokine_Receptors
<i>ACKR3</i>	atypical chemokine receptor 3	Chemokine_Receptors
<i>CYSLTR1</i>	cysteinyl leukotriene receptor 1	Chemokine_Receptors
<i>CYSLTR2</i>	cysteinyl leukotriene receptor 2	Chemokine_Receptors
<i>ACKR1</i>	atypical chemokine receptor 1 (Duffy blood group)	Chemokine_Receptors
<i>EDNRA</i>	endothelin receptor type A	Chemokine_Receptors
<i>EDNRB</i>	endothelin receptor type B	Chemokine_Receptors
<i>FPR1</i>	formyl peptide receptor 1	Chemokine_Receptors
<i>FPR2</i>	formyl peptide receptor 2	Chemokine_Receptors
<i>FPR2</i>	formyl peptide receptor 2	Chemokine_Receptors
<i>GPR17</i>	G protein-coupled receptor 17	Chemokine_Receptors
<i>GPR32</i>	G protein-coupled receptor 32	Chemokine_Receptors
<i>GPR33</i>	G protein-coupled receptor 33	Chemokine_Receptors
<i>PTGDR2</i>	prostaglandin D2 receptor 2	Chemokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>C5AR2</i>	complement component 5a receptor 2	Chemokine_Receptors
<i>CXCR1</i>	C-X-C motif chemokine receptor 1	Chemokine_Receptors
<i>CXCR2</i>	C-X-C motif chemokine receptor 2	Chemokine_Receptors
<i>LTB4R</i>	leukotriene B4 receptor	Chemokine_Receptors
<i>LTB4R2</i>	leukotriene B4 receptor 2	Chemokine_Receptors
<i>PLAUR</i>	plasminogen activator, urokinase receptor	Chemokine_Receptors
<i>PLXNA1</i>	plexin A1	Chemokine_Receptors
<i>PLXNA2</i>	plexin A2	Chemokine_Receptors
<i>PLXNA3</i>	plexin A3	Chemokine_Receptors
<i>PLXNA4</i>	plexin A4	Chemokine_Receptors
<i>PLXNB1</i>	plexin B1	Chemokine_Receptors
<i>PLXNB2</i>	plexin B2	Chemokine_Receptors
<i>PLXNB3</i>	plexin B3	Chemokine_Receptors
<i>PLXNC1</i>	plexin C1	Chemokine_Receptors
<i>PLXND1</i>	plexin D1	Chemokine_Receptors
<i>PTAFR</i>	platelet activating factor receptor	Chemokine_Receptors
<i>ROBO1</i>	roundabout guidance receptor 1	Chemokine_Receptors
<i>ROBO2</i>	roundabout guidance receptor 2	Chemokine_Receptors
<i>ROBO3</i>	roundabout guidance receptor 3	Chemokine_Receptors
<i>RXFP3</i>	relaxin family peptide receptor 3	Chemokine_Receptors
<i>XCR1</i>	X-C motif chemokine receptor 1	Chemokine_Receptors
<i>ADIPOQ</i>	adiponectin, C1Q and collagen domain containing	Cytokines
<i>ADM</i>	adrenomedullin	Cytokines
<i>ADM2</i>	adrenomedullin 2	Cytokines
<i>AGRP</i>	agouti related neuro peptide	Cytokines
<i>AGT</i>	angiotensinogen	Cytokines
<i>AMBN</i>	ameloblastin	Cytokines
<i>AMELX</i>	amelogenin X-linked	Cytokines
<i>AMH</i>	anti-Mullerian hormone	Cytokines
<i>ANGPTL5</i>	angiopoietin like 5	Cytokines
<i>ANGPTL7</i>	angiopoietin like 7	Cytokines
<i>APLN</i>	apelin	Cytokines
<i>AREG</i>	amphiregulin	Cytokines
<i>MANF</i>	mesencephalic astrocyte derived neurotrophic factor	Cytokines
<i>CDNF</i>	cerebral dopamine neurotrophic factor	Cytokines
<i>ARTN</i>	artemin	Cytokines
<i>AVP</i>	arginine vasopressin	Cytokines
<i>AZU1</i>	azuocidin 1	Cytokines
<i>BDNF</i>	brain derived neurotrophic factor	Cytokines
<i>BMP1</i>	bone morphogenetic protein 1	Cytokines
<i>BMP10</i>	bone morphogenetic protein 10	Cytokines
<i>BMP15</i>	bone morphogenetic protein 15	Cytokines
<i>BMP2</i>	bone morphogenetic protein 2	Cytokines
<i>BMP3</i>	bone morphogenetic protein 3	Cytokines
<i>BMP4</i>	bone morphogenetic protein 4	Cytokines
<i>BMP5</i>	bone morphogenetic protein 5	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>BMP6</i>	bone morphogenetic protein 6	Cytokines
<i>BMP7</i>	bone morphogenetic protein 7	Cytokines
<i>BMP8A</i>	bone morphogenetic protein 8a	Cytokines
<i>BMP8B</i>	bone morphogenetic protein 8b	Cytokines
<i>BTC</i>	betacellulin	Cytokines
<i>MYDGF</i>	myeloid derived growth factor	Cytokines
<i>C3</i>	complement C3	Cytokines
<i>C5</i>	complement C5	Cytokines
<i>CALCA</i>	calcitonin related polypeptide alpha	Cytokines
<i>CALCB</i>	calcitonin related polypeptide beta	Cytokines
<i>CAMP</i>	cathelicidin antimicrobial peptide	Cytokines
<i>CAT</i>	catalase	Cytokines
<i>CCK</i>	cholecystokinin	Cytokines
<i>CCL1</i>	C-C motif chemokine ligand 1	Cytokines
<i>CCL11</i>	C-C motif chemokine ligand 11	Cytokines
<i>CCL13</i>	C-C motif chemokine ligand 13	Cytokines
<i>CCL14</i>	C-C motif chemokine ligand 14	Cytokines
<i>CCL15-CCL14</i>	CCL15-CCL14 readthrough (NMD candidate)	Cytokines
<i>CCL15</i>	C-C motif chemokine ligand 15	Cytokines
<i>CCL16</i>	C-C motif chemokine ligand 16	Cytokines
<i>CCL17</i>	C-C motif chemokine ligand 17	Cytokines
<i>CCL18</i>	C-C motif chemokine ligand 18	Cytokines
<i>CCL19</i>	C-C motif chemokine ligand 19	Cytokines
<i>CCL2</i>	C-C motif chemokine ligand 2	Cytokines
<i>CCL20</i>	C-C motif chemokine ligand 20	Cytokines
<i>CCL21</i>	C-C motif chemokine ligand 21	Cytokines
<i>CCL22</i>	C-C motif chemokine ligand 22	Cytokines
<i>CCL23</i>	C-C motif chemokine ligand 23	Cytokines
<i>CCL24</i>	C-C motif chemokine ligand 24	Cytokines
<i>CCL25</i>	C-C motif chemokine ligand 25	Cytokines
<i>CCL26</i>	C-C motif chemokine ligand 26	Cytokines
<i>CCL27</i>	C-C motif chemokine ligand 27	Cytokines
<i>CCL28</i>	C-C motif chemokine ligand 28	Cytokines
<i>CCL3</i>	C-C motif chemokine ligand 3	Cytokines
<i>CCL3L1</i>	C-C motif chemokine ligand 3 like 1	Cytokines
<i>CCL3P1</i>	C-C motif chemokine ligand 3 pseudogene 1	Cytokines
<i>CCL3L3</i>	C-C motif chemokine ligand 3 like 3	Cytokines
<i>CCL4</i>	C-C motif chemokine ligand 4	Cytokines
<i>CCL4L2</i>	C-C motif chemokine ligand 4 like 2	Cytokines
<i>CCL4L1</i>	C-C motif chemokine ligand 4 like 1	Cytokines
<i>CCL5</i>	C-C motif chemokine ligand 5	Cytokines
<i>CCL7</i>	C-C motif chemokine ligand 7	Cytokines
<i>CCL8</i>	C-C motif chemokine ligand 8	Cytokines
<i>CD320</i>	CD320 molecule	Cytokines
<i>CD40LG</i>	CD40 ligand	Cytokines
<i>CD70</i>	CD70 molecule	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>ADA2</i>	adenosine deaminase 2	Cytokines
<i>CER1</i>	cerberus 1, DAN family BMP antagonist	Cytokines
<i>CGA</i>	glycoprotein hormones, alpha polypeptide	Cytokines
<i>CGB3</i>	chorionic gonadotropin subunit beta 3	Cytokines
<i>CGB1</i>	chorionic gonadotropin subunit beta 1	Cytokines
<i>CGB2</i>	chorionic gonadotropin subunit beta 2	Cytokines
<i>CGB5</i>	chorionic gonadotropin subunit beta 5	Cytokines
<i>CGB7</i>	chorionic gonadotropin subunit beta 7	Cytokines
<i>CGB8</i>	chorionic gonadotropin subunit beta 8	Cytokines
<i>CHGA</i>	chromogranin A	Cytokines
<i>CHGB</i>	chromogranin B	Cytokines
<i>CKLF</i>	chemokine like factor	Cytokines
<i>CLCF1</i>	cardiotrophin like cytokine factor 1	Cytokines
<i>CLEC11A</i>	C-type lectin domain containing 11A	Cytokines
<i>CMA1</i>	chymase 1	Cytokines
<i>CMTM1</i>	CKLF like MARVEL transmembrane domain containing 1	Cytokines
<i>CMTM2</i>	CKLF like MARVEL transmembrane domain containing 2	Cytokines
<i>CMTM3</i>	CKLF like MARVEL transmembrane domain containing 3	Cytokines
<i>CMTM4</i>	CKLF like MARVEL transmembrane domain containing 4	Cytokines
<i>CMTM5</i>	CKLF like MARVEL transmembrane domain containing 5	Cytokines
<i>CMTM6</i>	CKLF like MARVEL transmembrane domain containing 6	Cytokines
<i>CMTM7</i>	CKLF like MARVEL transmembrane domain containing 7	Cytokines
<i>CMTM8</i>	CKLF like MARVEL transmembrane domain containing 8	Cytokines
<i>CNTF</i>	ciliary neurotrophic factor	Cytokines
<i>CORT</i>	cortistatin	Cytokines
<i>CRH</i>	corticotropin releasing hormone	Cytokines
<i>CSF1</i>	colony stimulating factor 1	Cytokines
<i>CSF2</i>	colony stimulating factor 2	Cytokines
<i>CSF3</i>	colony stimulating factor 3	Cytokines
<i>CSH1</i>	chorionic somatomammotropin hormone 1	Cytokines
<i>CSH2</i>	chorionic somatomammotropin hormone 2	Cytokines
<i>CSHL1</i>	chorionic somatomammotropin hormone like 1	Cytokines
<i>CSPG5</i>	chondroitin sulfate proteoglycan 5	Cytokines
<i>CTF1</i>	cardiotrophin 1	Cytokines
<i>CCN2</i>	cellular communication network factor 2	Cytokines
<i>CTSG</i>	cathepsin G	Cytokines
<i>CX3CL1</i>	C-X3-C motif chemokine ligand 1	Cytokines
<i>CXCL1</i>	C-X-C motif chemokine ligand 1	Cytokines
<i>CXCL10</i>	C-X-C motif chemokine ligand 10	Cytokines
<i>CXCL11</i>	C-X-C motif chemokine ligand 11	Cytokines
<i>CXCL12</i>	C-X-C motif chemokine ligand 12	Cytokines
<i>CXCL13</i>	C-X-C motif chemokine ligand 13	Cytokines
<i>CXCL14</i>	C-X-C motif chemokine ligand 14	Cytokines
<i>CXCL16</i>	C-X-C motif chemokine ligand 16	Cytokines
<i>CXCL17</i>	C-X-C motif chemokine ligand 17	Cytokines
<i>CXCL2</i>	C-X-C motif chemokine ligand 2	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>CXCL3</i>	C-X-C motif chemokine ligand 3	Cytokines
<i>CXCL5</i>	C-X-C motif chemokine ligand 5	Cytokines
<i>CXCL6</i>	C-X-C motif chemokine ligand 6	Cytokines
<i>CXCL9</i>	C-X-C motif chemokine ligand 9	Cytokines
<i>CCN1</i>	cellular communication network factor 1	Cytokines
<i>DEFA1</i>	defensin alpha 1	Cytokines
<i>DEFA3</i>	defensin alpha 3	Cytokines
<i>DEFA5</i>	defensin alpha 5	Cytokines
<i>DEFB1</i>	defensin beta 1	Cytokines
<i>DEFB103B</i>	defensin beta 103B	Cytokines
<i>DEFB104A</i>	defensin beta 104A	Cytokines
<i>DEFB4A</i>	defensin beta 4A	Cytokines
<i>DKK1</i>	dickkopf WNT signaling pathway inhibitor 1	Cytokines
<i>EBI3</i>	Epstein-Barr virus induced 3	Cytokines
<i>EDN1</i>	endothelin 1	Cytokines
<i>EDN2</i>	endothelin 2	Cytokines
<i>EDN3</i>	endothelin 3	Cytokines
<i>EGF</i>	epidermal growth factor	Cytokines
<i>EPGN</i>	epithelial mitogen	Cytokines
<i>EPO</i>	erythropoietin	Cytokines
<i>EREG</i>	epiregulin	Cytokines
<i>ESM1</i>	endothelial cell specific molecule 1	Cytokines
<i>FAM3B</i>	FAM3 metabolism regulating signaling molecule B	Cytokines
<i>FAM3C</i>	FAM3 metabolism regulating signaling molecule C	Cytokines
<i>FAM3D</i>	FAM3 metabolism regulating signaling molecule D	Cytokines
<i>FASLG</i>	Fas ligand	Cytokines
<i>FGF1</i>	fibroblast growth factor 1	Cytokines
<i>FGF10</i>	fibroblast growth factor 10	Cytokines
<i>FGF11</i>	fibroblast growth factor 11	Cytokines
<i>FGF12</i>	fibroblast growth factor 12	Cytokines
<i>FGF13</i>	fibroblast growth factor 13	Cytokines
<i>FGF14</i>	fibroblast growth factor 14	Cytokines
<i>FGF16</i>	fibroblast growth factor 16	Cytokines
<i>FGF17</i>	fibroblast growth factor 17	Cytokines
<i>FGF18</i>	fibroblast growth factor 18	Cytokines
<i>FGF19</i>	fibroblast growth factor 19	Cytokines
<i>FGF2</i>	fibroblast growth factor 2	Cytokines
<i>FGF20</i>	fibroblast growth factor 20	Cytokines
<i>FGF21</i>	fibroblast growth factor 21	Cytokines
<i>FGF22</i>	fibroblast growth factor 22	Cytokines
<i>FGF23</i>	fibroblast growth factor 23	Cytokines
<i>FGF3</i>	fibroblast growth factor 3	Cytokines
<i>FGF4</i>	fibroblast growth factor 4	Cytokines
<i>FGF5</i>	fibroblast growth factor 5	Cytokines
<i>FGF6</i>	fibroblast growth factor 6	Cytokines
<i>FGF7</i>	fibroblast growth factor 7	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>FGF8</i>	fibroblast growth factor 8	Cytokines
<i>FGF9</i>	fibroblast growth factor 9	Cytokines
<i>VEGFD</i>	vascular endothelial growth factor D	Cytokines
<i>FIGNL2</i>	fidgetin like 2	Cytokines
<i>FLT3LG</i>	fms related receptor tyrosine kinase 3 ligand	Cytokines
<i>FSHB</i>	follicle stimulating hormone subunit beta	Cytokines
<i>GAL</i>	galanin and GMAP prepropeptide	Cytokines
<i>GALP</i>	galanin like peptide	Cytokines
<i>GAST</i>	gastrin	Cytokines
<i>GCG</i>	glucagon	Cytokines
<i>GDF1</i>	growth differentiation factor 1	Cytokines
<i>GDF10</i>	growth differentiation factor 10	Cytokines
<i>GDF11</i>	growth differentiation factor 11	Cytokines
<i>GDF15</i>	growth differentiation factor 15	Cytokines
<i>GDF2</i>	growth differentiation factor 2	Cytokines
<i>GDF3</i>	growth differentiation factor 3	Cytokines
<i>GDF5</i>	growth differentiation factor 5	Cytokines
<i>GDF6</i>	growth differentiation factor 6	Cytokines
<i>GDF7</i>	growth differentiation factor 7	Cytokines
<i>GDF9</i>	growth differentiation factor 9	Cytokines
<i>GDNF</i>	glial cell derived neurotrophic factor	Cytokines
<i>GH1</i>	growth hormone 1	Cytokines
<i>GH2</i>	growth hormone 2	Cytokines
<i>GHRH</i>	growth hormone releasing hormone	Cytokines
<i>GHRL</i>	ghrelin and obestatin prepropeptide	Cytokines
<i>GIP</i>	gastric inhibitory polypeptide	Cytokines
<i>GKN1</i>	gastrokin 1	Cytokines
<i>GMFB</i>	glia maturation factor beta	Cytokines
<i>GMFG</i>	glia maturation factor gamma	Cytokines
<i>GNRH1</i>	gonadotropin releasing hormone 1	Cytokines
<i>GNRH2</i>	gonadotropin releasing hormone 2	Cytokines
<i>GPHA2</i>	glycoprotein hormone subunit alpha 2	Cytokines
<i>GPHB5</i>	glycoprotein hormone subunit beta 5	Cytokines
<i>GPI</i>	glucose-6-phosphate isomerase	Cytokines
<i>GREM1</i>	gremlin 1, DAN family BMP antagonist	Cytokines
<i>GREM2</i>	gremlin 2, DAN family BMP antagonist	Cytokines
<i>GRN</i>	granulin precursor	Cytokines
<i>GRP</i>	gastrin releasing peptide	Cytokines
<i>GUCA2A</i>	guanylate cyclase activator 2A	Cytokines
<i>HAMP</i>	hepcidin antimicrobial peptide	Cytokines
<i>HBEGF</i>	heparin binding EGF like growth factor	Cytokines
<i>HDGF</i>	heparin binding growth factor	Cytokines
<i>HDGFL3</i>	HDGF like 3	Cytokines
<i>HGF</i>	hepatocyte growth factor	Cytokines
<i>HTN3</i>	histatin 3	Cytokines
<i>IAPP</i>	islet amyloid polypeptide	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IFNA1</i>	interferon alpha 1	Cytokines
<i>IFNA10</i>	interferon alpha 10	Cytokines
<i>IFNA13</i>	interferon alpha 13	Cytokines
<i>IFNA14</i>	interferon alpha 14	Cytokines
<i>IFNA16</i>	interferon alpha 16	Cytokines
<i>IFNA17</i>	interferon alpha 17	Cytokines
<i>IFNA2</i>	interferon alpha 2	Cytokines
<i>IFNA21</i>	interferon alpha 21	Cytokines
<i>IFNA4</i>	interferon alpha 4	Cytokines
<i>IFNA5</i>	interferon alpha 5	Cytokines
<i>IFNA6</i>	interferon alpha 6	Cytokines
<i>IFNA7</i>	interferon alpha 7	Cytokines
<i>IFNA8</i>	interferon alpha 8	Cytokines
<i>IFNB1</i>	interferon beta 1	Cytokines
<i>IFNE</i>	interferon epsilon	Cytokines
<i>IFNG</i>	interferon gamma	Cytokines
<i>IFNK</i>	interferon kappa	Cytokines
<i>IFNW1</i>	interferon omega 1	Cytokines
<i>IGF1</i>	insulin like growth factor 1	Cytokines
<i>IGF2</i>	insulin like growth factor 2	Cytokines
<i>IL10</i>	interleukin 10	Cytokines
<i>IL11</i>	interleukin 11	Cytokines
<i>IL12A</i>	interleukin 12A	Cytokines
<i>IL12B</i>	interleukin 12B	Cytokines
<i>IL13</i>	interleukin 13	Cytokines
<i>IL15</i>	interleukin 15	Cytokines
<i>IL16</i>	interleukin 16	Cytokines
<i>IL17A</i>	interleukin 17A	Cytokines
<i>IL17B</i>	interleukin 17B	Cytokines
<i>IL17C</i>	interleukin 17C	Cytokines
<i>IL17D</i>	interleukin 17D	Cytokines
<i>IL17F</i>	interleukin 17F	Cytokines
<i>IL18</i>	interleukin 18	Cytokines
<i>IL19</i>	interleukin 19	Cytokines
<i>IL1A</i>	interleukin 1 alpha	Cytokines
<i>IL1B</i>	interleukin 1 beta	Cytokines
<i>IL1F10</i>	interleukin 1 family member 10	Cytokines
<i>IL36RN</i>	interleukin 36 receptor antagonist	Cytokines
<i>IL36A</i>	interleukin 36 alpha	Cytokines
<i>IL37</i>	interleukin 37	Cytokines
<i>IL36B</i>	interleukin 36 beta	Cytokines
<i>IL36G</i>	interleukin 36 gamma	Cytokines
<i>IL1RN</i>	interleukin 1 receptor antagonist	Cytokines
<i>IL2</i>	interleukin 2	Cytokines
<i>IL20</i>	interleukin 20	Cytokines
<i>IL21</i>	interleukin 21	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IL22</i>	interleukin 22	Cytokines
<i>IL23A</i>	interleukin 23 subunit alpha	Cytokines
<i>IL24</i>	interleukin 24	Cytokines
<i>IL25</i>	interleukin 25	Cytokines
<i>IL26</i>	interleukin 26	Cytokines
<i>IL27</i>	interleukin 27	Cytokines
<i>IFNL2</i>	interferon lambda 2	Cytokines
<i>IFNL3</i>	interferon lambda 3	Cytokines
<i>IFNL1</i>	interferon lambda 1	Cytokines
<i>IL3</i>	interleukin 3	Cytokines
<i>IL31</i>	interleukin 31	Cytokines
<i>IL32</i>	interleukin 32	Cytokines
<i>IL33</i>	interleukin 33	Cytokines
<i>IL34</i>	interleukin 34	Cytokines
<i>IL4</i>	interleukin 4	Cytokines
<i>IL5</i>	interleukin 5	Cytokines
<i>IL6</i>	interleukin 6	Cytokines
<i>IL6ST</i>	interleukin 6 signal transducer	Cytokines
<i>IL7</i>	interleukin 7	Cytokines
<i>CXCL8</i>	C-X-C motif chemokine ligand 8	Cytokines
<i>IL9</i>	interleukin 9	Cytokines
<i>INHHA</i>	inhibin subunit alpha	Cytokines
<i>INHBA</i>	inhibin subunit beta A	Cytokines
<i>INHBB</i>	inhibin subunit beta B	Cytokines
<i>INHBC</i>	inhibin subunit beta C	Cytokines
<i>INHBE</i>	inhibin subunit beta E	Cytokines
<i>INS</i>	insulin	Cytokines
<i>INS-IGF2</i>	INS-IGF2 readthrough	Cytokines
<i>INSL3</i>	insulin like 3	Cytokines
<i>INSL4</i>	insulin like 4	Cytokines
<i>INSL5</i>	insulin like 5	Cytokines
<i>INSL6</i>	insulin like 6	Cytokines
<i>JAG1</i>	jagged canonical Notch ligand 1	Cytokines
<i>JAG2</i>	jagged canonical Notch ligand 2	Cytokines
<i>FGF7P6</i>	fibroblast growth factor 7 pseudogene 6	Cytokines
<i>FGF7P3</i>	fibroblast growth factor 7 pseudogene 3	Cytokines
<i>KITLG</i>	KIT ligand	Cytokines
<i>KL</i>	klotho	Cytokines
<i>LACRT</i>	lacritin	Cytokines
<i>LECT2</i>	leukocyte cell derived chemotaxin 2	Cytokines
<i>LEFTY1</i>	left-right determination factor 1	Cytokines
<i>LEFTY2</i>	left-right determination factor 2	Cytokines
<i>LEP</i>	leptin	Cytokines
<i>LHB</i>	luteinizing hormone subunit beta	Cytokines
<i>LIF</i>	LIF interleukin 6 family cytokine	Cytokines
<i>LRSAM1</i>	leucine rich repeat and sterile alpha motif containing 1	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>LTA</i>	lymphotoxin alpha	Cytokines
<i>LTB</i>	lymphotoxin beta	Cytokines
<i>LTBP1</i>	latent transforming growth factor beta binding protein 1	Cytokines
<i>LTBP2</i>	latent transforming growth factor beta binding protein 2	Cytokines
<i>LTBP3</i>	latent transforming growth factor beta binding protein 3	Cytokines
<i>LTBP4</i>	latent transforming growth factor beta binding protein 4	Cytokines
<i>MDK</i>	midkine	Cytokines
<i>MIA</i>	MIA SH3 domain containing	Cytokines
<i>MIF</i>	macrophage migration inhibitory factor	Cytokines
<i>MLN</i>	motilin	Cytokines
<i>MSTN</i>	myostatin	Cytokines
<i>NAMPT</i>	nicotinamide phosphoribosyltransferase	Cytokines
<i>NDP</i>	norrin cystine knot growth factor NDP	Cytokines
<i>NENF</i>	neudesin neurotrophic factor	Cytokines
<i>NGF</i>	nerve growth factor	Cytokines
<i>NMB</i>	neuromedin B	Cytokines
<i>NODAL</i>	nodal growth differentiation factor	Cytokines
<i>CCN3</i>	cellular communication network factor 3	Cytokines
<i>NPFF</i>	neuropeptide FF-amide peptide precursor	Cytokines
<i>NPPA</i>	natriuretic peptide A	Cytokines
<i>NPPB</i>	natriuretic peptide B	Cytokines
<i>NPPC</i>	natriuretic peptide C	Cytokines
<i>NPY</i>	neuropeptide Y	Cytokines
<i>NRG1</i>	neuregulin 1	Cytokines
<i>NRG2</i>	neuregulin 2	Cytokines
<i>NRG3</i>	neuregulin 3	Cytokines
<i>NRG4</i>	neuregulin 4	Cytokines
<i>NRTN</i>	neurturin	Cytokines
<i>NTF3</i>	neurotrophin 3	Cytokines
<i>NTF4</i>	neurotrophin 4	Cytokines
<i>NTS</i>	neurotensin	Cytokines
<i>NUDT6</i>	nudix hydrolase 6	Cytokines
<i>OGN</i>	osteoglycin	Cytokines
<i>OSGIN1</i>	oxidative stress induced growth inhibitor 1	Cytokines
<i>OSM</i>	oncostatin M	Cytokines
<i>OSTN</i>	osteocrin	Cytokines
<i>OXT</i>	oxytocin/neurophysin I prepropeptide	Cytokines
<i>ENDOU</i>	endonuclease, poly(U) specific	Cytokines
<i>PDGFA</i>	platelet derived growth factor subunit A	Cytokines
<i>PDGFB</i>	platelet derived growth factor subunit B	Cytokines
<i>PDGFC</i>	platelet derived growth factor C	Cytokines
<i>PDGFD</i>	platelet derived growth factor D	Cytokines
<i>PDGFRA</i>	platelet derived growth factor receptor alpha	Cytokines
<i>PDGFRB</i>	platelet derived growth factor receptor beta	Cytokines
<i>PDGFRL</i>	platelet derived growth factor receptor like	Cytokines
<i>PDYN</i>	prodynorphin	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>PENK</i>	proenkephalin	Cytokines
<i>PF4</i>	platelet factor 4	Cytokines
<i>PF4V1</i>	platelet factor 4 variant 1	Cytokines
<i>PGF</i>	placental growth factor	Cytokines
<i>PLAU</i>	plasminogen activator, urokinase	Cytokines
<i>PMCH</i>	pro-melanin concentrating hormone	Cytokines
<i>PNOC</i>	prepronociceptin	Cytokines
<i>POMC</i>	proopiomelanocortin	Cytokines
<i>PPBP</i>	pro-platelet basic protein	Cytokines
<i>PPBPP1</i>	pro-platelet basic protein pseudogene 1	Cytokines
<i>PPBPP2</i>	pro-platelet basic protein pseudogene 2	Cytokines
<i>PPY</i>	pancreatic polypeptide	Cytokines
<i>PRL</i>	prolactin	Cytokines
<i>PRLH</i>	prolactin releasing hormone	Cytokines
<i>PROK1</i>	prokineticin 1	Cytokines
<i>PROK2</i>	prokineticin 2	Cytokines
<i>PSPN</i>	persephin	Cytokines
<i>PTH</i>	parathyroid hormone	Cytokines
<i>PTH2</i>	parathyroid hormone 2	Cytokines
<i>PTHLH</i>	parathyroid hormone like hormone	Cytokines
<i>PTN</i>	pleiotrophin	Cytokines
<i>PYY</i>	peptide YY	Cytokines
<i>QRFP</i>	pyroglutamylated RFamide peptide	Cytokines
<i>RABEP1</i>	rabaptin, RAB GTPase binding effector protein 1	Cytokines
<i>RABEP2</i>	rabaptin, RAB GTPase binding effector protein 2	Cytokines
<i>REG1A</i>	regenerating family member 1 alpha	Cytokines
<i>RETN</i>	resistin	Cytokines
<i>RETNLB</i>	resistin like beta	Cytokines
<i>RLN1</i>	relaxin 1	Cytokines
<i>RLN2</i>	relaxin 2	Cytokines
<i>RLN3</i>	relaxin 3	Cytokines
<i>RNASE2</i>	ribonuclease A family member 2	Cytokines
<i>S100A6</i>	S100 calcium binding protein A6	Cytokines
<i>SAA1</i>	serum amyloid A1	Cytokines
<i>SAA2</i>	serum amyloid A2	Cytokines
<i>SBDS</i>	SBDS ribosome maturation factor	Cytokines
<i>SCG2</i>	secretogranin II	Cytokines
<i>SCGB3A1</i>	secretoglobulin family 3A member 1	Cytokines
<i>SCT</i>	secretin	Cytokines
<i>AIMP1</i>	aminoacyl tRNA synthetase complex interacting multifunctional protein 1	Cytokines
<i>SECTM1</i>	secreted and transmembrane 1	Cytokines
<i>SEMA3A</i>	semaphorin 3A	Cytokines
<i>SEMA3B</i>	semaphorin 3B	Cytokines
<i>SEMA3C</i>	semaphorin 3C	Cytokines
<i>SEMA3D</i>	semaphorin 3D	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>SEMA3E</i>	semaphorin 3E	Cytokines
<i>SEMA3F</i>	semaphorin 3F	Cytokines
<i>SEMA3G</i>	semaphorin 3G	Cytokines
<i>SEMA4A</i>	semaphorin 4A	Cytokines
<i>SEMA4B</i>	semaphorin 4B	Cytokines
<i>SEMA4C</i>	semaphorin 4C	Cytokines
<i>SEMA4D</i>	semaphorin 4D	Cytokines
<i>SEMA4F</i>	ssemaphorin 4F	Cytokines
<i>SEMA4G</i>	semaphorin 4G	Cytokines
<i>SEMA5A</i>	semaphorin 5A	Cytokines
<i>SEMA5B</i>	semaphorin 5B	Cytokines
<i>SEMA6A</i>	semaphorin 6A	Cytokines
<i>SEMA6B</i>	semaphorin 6B	Cytokines
<i>SEMA6C</i>	semaphorin 6C	Cytokines
<i>SEMA6D</i>	semaphorin 6D	Cytokines
<i>SEMA7A</i>	semaphorin 7A (John Milton Hagen blood group)	Cytokines
<i>SLIT1</i>	slit guidance ligand 1	Cytokines
<i>SLIT2</i>	slit guidance ligand 2	Cytokines
<i>SLURP1</i>	secreted LY6/PLAUR domain containing 1	Cytokines
<i>SPP1</i>	secreted phosphoprotein 1	Cytokines
<i>SST</i>	somatostatin	Cytokines
<i>STC1</i>	stanniocalcin 1	Cytokines
<i>STC2</i>	stanniocalcin 2	Cytokines
<i>TAC1</i>	tachykinin precursor 1	Cytokines
<i>TDGF1</i>	teratocarcinoma-derived growth factor 1	Cytokines
<i>TDGF1P3</i>	teratocarcinoma-derived growth factor 1 pseudogene 3	Cytokines
<i>TG</i>	thyroglobulin	Cytokines
<i>TGFA</i>	transforming growth factor alpha	Cytokines
<i>TGFB1</i>	transforming growth factor beta 1	Cytokines
<i>TGFB2</i>	transforming growth factor beta 2	Cytokines
<i>TGFB3</i>	transforming growth factor beta 3	Cytokines
<i>THPO</i>	thrombopoietin	Cytokines
<i>TNC</i>	tenascin C	Cytokines
<i>TNF</i>	tumor necrosis factor	Cytokines
<i>TNFRSF11B</i>	TNF receptor superfamily member 11b	Cytokines
<i>TNFSF10</i>	TNF superfamily member 10	Cytokines
<i>TNFSF11</i>	TNF superfamily member 11	Cytokines
<i>TNFSF12</i>	TNF superfamily member 12	Cytokines
<i>TNFSF13</i>	TNF superfamily member 13	Cytokines
<i>TNFSF13B</i>	TNF superfamily member 13b	Cytokines
<i>TNFSF14</i>	TNF superfamily member 14	Cytokines
<i>TNFSF15</i>	TNF superfamily member 15	Cytokines
<i>TNFSF18</i>	TNF superfamily member 18	Cytokines
<i>TNFSF4</i>	TNF superfamily member 4	Cytokines
<i>TNFSF8</i>	TNF superfamily member 8	Cytokines
<i>TNFSF9</i>	TNF superfamily member 9	Cytokines

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TOR2A</i>	torsin family 2 member A	Cytokines
<i>TRH</i>	thyrotropin releasing hormone	Cytokines
<i>TSHB</i>	thyroid stimulating hormone subunit beta	Cytokines
<i>TSLP</i>	thymic stromal lymphopoietin	Cytokines
<i>TXLNA</i>	taxilin alpha	Cytokines
<i>TYMP</i>	thymidine phosphorylase	Cytokines
<i>UCN</i>	urocortin	Cytokines
<i>UCN2</i>	urocortin 2	Cytokines
<i>UCN3</i>	urocortin 3	Cytokines
<i>UTS2</i>	urotensin 2	Cytokines
<i>UTS2B</i>	urotensin 2B	Cytokines
<i>VEGFA</i>	vascular endothelial growth factor A	Cytokines
<i>VEGFB</i>	vascular endothelial growth factor B	Cytokines
<i>VEGFC</i>	vascular endothelial growth factor C	Cytokines
<i>VGF</i>	VGF nerve growth factor inducible	Cytokines
<i>VIP</i>	vasoactive intestinal peptide	Cytokines
<i>XCL1</i>	X-C motif chemokine ligand 1	Cytokines
<i>XCL2</i>	X-C motif chemokine ligand 2	Cytokines
<i>ACVR1B</i>	activin A receptor type 1B	Cytokine_Receptors
<i>ACVR1C</i>	activin A receptor type 1C	Cytokine_Receptors
<i>ACVR2A</i>	activin A receptor type 2A	Cytokine_Receptors
<i>ACVR2B</i>	activin A receptor type 2B	Cytokine_Receptors
<i>ACVRL1</i>	activin A receptor like type 1	Cytokine_Receptors
<i>ADCYAP1R1</i>	ADCYAP receptor type I	Cytokine_Receptors
<i>ADIPOR1</i>	adiponectin receptor 1	Cytokine_Receptors
<i>ADIPOR2</i>	adiponectin receptor 2	Cytokine_Receptors
<i>ADRB1</i>	adrenoceptor beta 1	Cytokine_Receptors
<i>ADRB2</i>	adrenoceptor beta 2	Cytokine_Receptors
<i>AGTR1</i>	angiotensin II receptor type 1	Cytokine_Receptors
<i>AGTR2</i>	angiotensin II receptor type 2	Cytokine_Receptors
<i>AMHR2</i>	anti-Mullerian hormone receptor type 2	Cytokine_Receptors
<i>ANGPT1</i>	angiopoietin 1	Cytokine_Receptors
<i>ANGPT4</i>	angiopoietin 4	Cytokine_Receptors
<i>ANGPTL1</i>	angiopoietin like 1	Cytokine_Receptors
<i>ANGPTL2</i>	angiopoietin like 2	Cytokine_Receptors
<i>ANGPTL3</i>	angiopoietin like 3	Cytokine_Receptors
<i>ANGPTL4</i>	angiopoietin like 4	Cytokine_Receptors
<i>ANGPTL6</i>	angiopoietin like 6	Cytokine_Receptors
<i>APLNR</i>	apelin receptor	Cytokine_Receptors
<i>AR</i>	androgen receptor	Cytokine_Receptors
<i>AVPR1A</i>	arginine vasopressin receptor 1A	Cytokine_Receptors
<i>AVPR1B</i>	arginine vasopressin receptor 1B	Cytokine_Receptors
<i>AVPR2</i>	arginine vasopressin receptor 2	Cytokine_Receptors
<i>BMPR1A</i>	bone morphogenetic protein receptor type 1A	Cytokine_Receptors
<i>BMPR1B</i>	bone morphogenetic protein receptor type 1B	Cytokine_Receptors
<i>BMPR2</i>	bone morphogenetic protein receptor type 2	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>BRD8</i>	bromodomain containing 8	Cytokine_Receptors
<i>C3AR1</i>	complement C3a receptor 1	Cytokine_Receptors
<i>C5AR1</i>	complement C5a receptor 1	Cytokine_Receptors
<i>CALCR</i>	calcitonin receptor	Cytokine_Receptors
<i>CALCRL</i>	calcitonin receptor like receptor	Cytokine_Receptors
<i>ACKR2</i>	atypical chemokine receptor 2	Cytokine_Receptors
<i>CCR1</i>	C-C motif chemokine receptor 1	Cytokine_Receptors
<i>CCR10</i>	C-C motif chemokine receptor 10	Cytokine_Receptors
<i>CCR3</i>	C-C motif chemokine receptor 3	Cytokine_Receptors
<i>CCR4</i>	C-C motif chemokine receptor 4	Cytokine_Receptors
<i>CCR5</i>	C-C motif chemokine receptor 5	Cytokine_Receptors
<i>CCR6</i>	C-C motif chemokine receptor 6	Cytokine_Receptors
<i>CCR7</i>	C-C motif chemokine receptor 7	Cytokine_Receptors
<i>CCR8</i>	C-C motif chemokine receptor 8	Cytokine_Receptors
<i>CCR9</i>	C-C motif chemokine receptor 9	Cytokine_Receptors
<i>ACKR4</i>	atypical chemokine receptor 4	Cytokine_Receptors
<i>CCRL2</i>	C-C motif chemokine receptor like 2	Cytokine_Receptors
<i>CD40</i>	CD40 molecule	Cytokine_Receptors
<i>CMKLR1</i>	chemerin chemokine-like receptor 1	Cytokine_Receptors
<i>CNTFR</i>	ciliary neurotrophic factor receptor	Cytokine_Receptors
<i>CRHR1</i>	corticotropin releasing hormone receptor 1	Cytokine_Receptors
<i>CRHR2</i>	corticotropin releasing hormone receptor 2	Cytokine_Receptors
<i>CRIM1</i>	cysteine rich transmembrane BMP regulator 1	Cytokine_Receptors
<i>CRLF1</i>	cytokine receptor like factor 1	Cytokine_Receptors
<i>CRLF2</i>	cytokine receptor like factor 2	Cytokine_Receptors
<i>CRLF3</i>	cytokine receptor like factor 3	Cytokine_Receptors
<i>CSF1R</i>	colony stimulating factor 1 receptor	Cytokine_Receptors
<i>CSF2RA</i>	colony stimulating factor 2 receptor subunit alpha	Cytokine_Receptors
<i>CSF2RB</i>	colony stimulating factor 2 receptor subunit beta	Cytokine_Receptors
<i>CSF3R</i>	colony stimulating factor 3 receptor	Cytokine_Receptors
<i>CX3CR1</i>	C-X3-C motif chemokine receptor 1	Cytokine_Receptors
<i>CXCR3</i>	C-X-C motif chemokine receptor 3	Cytokine_Receptors
<i>CXCR4</i>	C-X-C motif chemokine receptor 4	Cytokine_Receptors
<i>CXCR5</i>	C-X-C motif chemokine receptor 5	Cytokine_Receptors
<i>CXCR6</i>	C-X-C motif chemokine receptor 6	Cytokine_Receptors
<i>ACKR3</i>	atypical chemokine receptor 3	Cytokine_Receptors
<i>CYSLTR1</i>	cysteinyl leukotriene receptor 1	Cytokine_Receptors
<i>CYSLTR2</i>	cysteinyl leukotriene receptor 2	Cytokine_Receptors
<i>ACKR1</i>	atypical chemokine receptor 1 (Duffy blood group)	Cytokine_Receptors
<i>EDNRA</i>	endothelin receptor type A	Cytokine_Receptors
<i>EDNRB</i>	endothelin receptor type B	Cytokine_Receptors
<i>EGFR</i>	epidermal growth factor receptor	Cytokine_Receptors
<i>ENG</i>	endoglin	Cytokine_Receptors
<i>EPOR</i>	erythropoietin receptor	Cytokine_Receptors
<i>ESR1</i>	estrogen receptor 1	Cytokine_Receptors
<i>ESR2</i>	estrogen receptor 2	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>ESRRA</i>	estrogen related receptor alpha	Cytokine_Receptors
<i>ESRRB</i>	estrogen related receptor beta	Cytokine_Receptors
<i>ESRRG</i>	estrogen related receptor gamma	Cytokine_Receptors
<i>FGFR1</i>	fibroblast growth factor receptor 1	Cytokine_Receptors
<i>FGFR2</i>	fibroblast growth factor receptor 2	Cytokine_Receptors
<i>FGFR3</i>	fibroblast growth factor receptor 3	Cytokine_Receptors
<i>FGFR4</i>	fibroblast growth factor receptor 4	Cytokine_Receptors
<i>FGFRL1</i>	fibroblast growth factor receptor like 1	Cytokine_Receptors
<i>FLT1</i>	fms related receptor tyrosine kinase 1	Cytokine_Receptors
<i>FLT3</i>	fms related receptor tyrosine kinase 3	Cytokine_Receptors
<i>FLT4</i>	fms related receptor tyrosine kinase 4	Cytokine_Receptors
<i>FPR1</i>	formyl peptide receptor 1	Cytokine_Receptors
<i>FPR2</i>	formyl peptide receptor 2	Cytokine_Receptors
<i>FPR2</i>	formyl peptide receptor 2	Cytokine_Receptors
<i>FSHR</i>	follicle stimulating hormone receptor	Cytokine_Receptors
<i>GALR2</i>	galanin receptor 2	Cytokine_Receptors
<i>GALR3</i>	galanin receptor 3	Cytokine_Receptors
<i>GCGR</i>	glucagon receptor	Cytokine_Receptors
<i>GHR</i>	growth hormone receptor	Cytokine_Receptors
<i>GHRHR</i>	growth hormone releasing hormone receptor	Cytokine_Receptors
<i>GHSR</i>	growth hormone secretagogue receptor	Cytokine_Receptors
<i>GIPR</i>	gastric inhibitory polypeptide receptor	Cytokine_Receptors
<i>GLP1R</i>	glucagon like peptide 1 receptor	Cytokine_Receptors
<i>GLP2R</i>	glucagon like peptide 2 receptor	Cytokine_Receptors
<i>GNRHR</i>	gonadotropin releasing hormone receptor	Cytokine_Receptors
<i>GPER1</i>	G protein-coupled estrogen receptor 1	Cytokine_Receptors
<i>GPR17</i>	G protein-coupled receptor 17	Cytokine_Receptors
<i>GPR32</i>	G protein-coupled receptor 32	Cytokine_Receptors
<i>GPR33</i>	G protein-coupled receptor 33	Cytokine_Receptors
<i>PTGDR2</i>	prostaglandin D2 receptor 2	Cytokine_Receptors
<i>C5AR2</i>	complement component 5a receptor 2	Cytokine_Receptors
<i>HNF4A</i>	hepatocyte nuclear factor 4 alpha	Cytokine_Receptors
<i>HNF4G</i>	hepatocyte nuclear factor 4 gamma	Cytokine_Receptors
<i>HTR3A</i>	5-hydroxytryptamine receptor 3A	Cytokine_Receptors
<i>HTR3B</i>	5-hydroxytryptamine receptor 3B	Cytokine_Receptors
<i>HTR3C</i>	5-hydroxytryptamine receptor 3C	Cytokine_Receptors
<i>HTR3D</i>	5-hydroxytryptamine receptor 3D	Cytokine_Receptors
<i>HTR3E</i>	5-hydroxytryptamine receptor 3E	Cytokine_Receptors
<i>IFNAR1</i>	interferon alpha and beta receptor subunit 1	Cytokine_Receptors
<i>IFNAR2</i>	interferon alpha and beta receptor subunit 2	Cytokine_Receptors
<i>IFNGR1</i>	interferon gamma receptor 1	Cytokine_Receptors
<i>IFNGR2</i>	interferon gamma receptor 2	Cytokine_Receptors
<i>IGF1R</i>	insulin like growth factor 1 receptor	Cytokine_Receptors
<i>IGF2R</i>	insulin like growth factor 2 receptor	Cytokine_Receptors
<i>IL10RA</i>	interleukin 10 receptor subunit alpha	Cytokine_Receptors
<i>IL10RB</i>	interleukin 10 receptor subunit beta	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IL11RA</i>	interleukin 11 receptor subunit alpha	Cytokine_Receptors
<i>IL12RB1</i>	interleukin 12 receptor subunit beta 1	Cytokine_Receptors
<i>IL12RB2</i>	interleukin 12 receptor subunit beta 2	Cytokine_Receptors
<i>IL13RA1</i>	interleukin 13 receptor subunit alpha 1	Cytokine_Receptors
<i>IL13RA2</i>	interleukin 13 receptor subunit alpha 2	Cytokine_Receptors
<i>IL15RA</i>	interleukin 15 receptor subunit alpha	Cytokine_Receptors
<i>IL2RB</i>	interleukin 2 receptor subunit beta	Cytokine_Receptors
<i>IL17RA</i>	interleukin 17 receptor A	Cytokine_Receptors
<i>IL17RB</i>	interleukin 17 receptor B	Cytokine_Receptors
<i>IL17RC</i>	interleukin 17 receptor C	Cytokine_Receptors
<i>IL17RD</i>	interleukin 17 receptor D	Cytokine_Receptors
<i>IL17RE</i>	interleukin 17 receptor E	Cytokine_Receptors
<i>IL18R1</i>	interleukin 18 receptor 1	Cytokine_Receptors
<i>IL18RAP</i>	interleukin 18 receptor accessory protein	Cytokine_Receptors
<i>IL1R1</i>	interleukin 1 receptor type 1	Cytokine_Receptors
<i>IL1R2</i>	interleukin 1 receptor type 2	Cytokine_Receptors
<i>IL1RAP</i>	interleukin 1 receptor accessory protein	Cytokine_Receptors
<i>IL1RL1</i>	interleukin 1 receptor like 1	Cytokine_Receptors
<i>IL1RL2</i>	interleukin 1 receptor like 2	Cytokine_Receptors
<i>IL20RA</i>	interleukin 20 receptor subunit alpha	Cytokine_Receptors
<i>IL20RB</i>	interleukin 20 receptor subunit beta	Cytokine_Receptors
<i>IL21R</i>	interleukin 21 receptor	Cytokine_Receptors
<i>IL22RA1</i>	interleukin 22 receptor subunit alpha 1	Cytokine_Receptors
<i>IL22RA2</i>	interleukin 22 receptor subunit alpha 2	Cytokine_Receptors
<i>IL23R</i>	interleukin 23 receptor	Cytokine_Receptors
<i>IL27RA</i>	interleukin 27 receptor subunit alpha	Cytokine_Receptors
<i>IFNLR1</i>	interferon lambda receptor 1	Cytokine_Receptors
<i>IL2RA</i>	interleukin 2 receptor subunit alpha	Cytokine_Receptors
<i>IL2RB</i>	interleukin 2 receptor subunit beta	Cytokine_Receptors
<i>IL2RG</i>	interleukin 2 receptor subunit gamma	Cytokine_Receptors
<i>IL31RA</i>	interleukin 31 receptor A	Cytokine_Receptors
<i>IL3RA</i>	interleukin 3 receptor subunit alpha	Cytokine_Receptors
<i>IL4R</i>	interleukin 4 receptor	Cytokine_Receptors
<i>IL5RA</i>	interleukin 5 receptor subunit alpha	Cytokine_Receptors
<i>IL6R</i>	interleukin 6 receptor	Cytokine_Receptors
<i>IL7R</i>	interleukin 7 receptor	Cytokine_Receptors
<i>CXCR1</i>	C-X-C motif chemokine receptor 1	Cytokine_Receptors
<i>CXCR2</i>	C-X-C motif chemokine receptor 2	Cytokine_Receptors
<i>IL9R</i>	interleukin 9 receptor	Cytokine_Receptors
<i>INSR</i>	insulin receptor	Cytokine_Receptors
<i>KDR</i>	kinase insert domain receptor	Cytokine_Receptors
<i>LEPR</i>	leptin receptor	Cytokine_Receptors
<i>LGR4</i>	leucine rich repeat containing G protein-coupled receptor 4	Cytokine_Receptors
<i>LGR5</i>	leucine rich repeat containing G protein-coupled receptor 5	Cytokine_Receptors
<i>LGR6</i>	leucine rich repeat containing G protein-coupled receptor 6	Cytokine_Receptors
<i>LHCGR</i>	luteinizing hormone/choriogonadotropin receptor	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>LIFR</i>	LIF receptor subunit alpha	Cytokine_Receptors
<i>LTB4R</i>	leukotriene B4 receptor	Cytokine_Receptors
<i>LTB4R2</i>	leukotriene B4 receptor 2	Cytokine_Receptors
<i>LTBR</i>	lymphotoxin beta receptor	Cytokine_Receptors
<i>MC1R</i>	melanocortin 1 receptor	Cytokine_Receptors
<i>MC2R</i>	melanocortin 2 receptor	Cytokine_Receptors
<i>MC3R</i>	melanocortin 3 receptor	Cytokine_Receptors
<i>MC4R</i>	melanocortin 4 receptor	Cytokine_Receptors
<i>MCHR1</i>	melanin concentrating hormone receptor 1	Cytokine_Receptors
<i>MCHR2</i>	melanin concentrating hormone receptor 2	Cytokine_Receptors
<i>MET</i>	MET proto-oncogene, receptor tyrosine kinase	Cytokine_Receptors
<i>MLNR</i>	motilin receptor	Cytokine_Receptors
<i>MPL</i>	MPL proto-oncogene, thrombopoietin receptor	Cytokine_Receptors
<i>MTNR1A</i>	melatonin receptor 1A	Cytokine_Receptors
<i>MTNR1B</i>	melatonin receptor 1B	Cytokine_Receptors
<i>NGFR</i>	nerve growth factor receptor	Cytokine_Receptors
<i>NMBR</i>	neuromedin B receptor	Cytokine_Receptors
<i>NPR1</i>	natriuretic peptide receptor 1	Cytokine_Receptors
<i>NPR3</i>	natriuretic peptide receptor 3	Cytokine_Receptors
<i>NROB1</i>	nuclear receptor subfamily 0 group B member 1	Cytokine_Receptors
<i>NROB2</i>	nuclear receptor subfamily 0 group B member 2	Cytokine_Receptors
<i>NR1D1</i>	nuclear receptor subfamily 1 group D member 1	Cytokine_Receptors
<i>NR1D2</i>	nuclear receptor subfamily 1 group D member 2	Cytokine_Receptors
<i>NR1H2</i>	nuclear receptor subfamily 1 group H member 2	Cytokine_Receptors
<i>NR1H3</i>	nuclear receptor subfamily 1 group H member 3	Cytokine_Receptors
<i>NR1H4</i>	nuclear receptor subfamily 1 group H member 4	Cytokine_Receptors
<i>NR1I2</i>	nuclear receptor subfamily 1 group I member 2	Cytokine_Receptors
<i>NR1I3</i>	nuclear receptor subfamily 1 group I member 3	Cytokine_Receptors
<i>NR2C1</i>	nuclear receptor subfamily 2 group C member 1	Cytokine_Receptors
<i>NR2C2</i>	nuclear receptor subfamily 2 group C member 2	Cytokine_Receptors
<i>NR2E1</i>	nuclear receptor subfamily 2 group E member 1	Cytokine_Receptors
<i>NR2E3</i>	nuclear receptor subfamily 2 group E member 3	Cytokine_Receptors
<i>NR2F1</i>	nuclear receptor subfamily 2 group F member 1	Cytokine_Receptors
<i>NR2F2</i>	nuclear receptor subfamily 2 group F member 2	Cytokine_Receptors
<i>NR2F6</i>	nuclear receptor subfamily 2 group F member 6	Cytokine_Receptors
<i>NR3C1</i>	nuclear receptor subfamily 3 group C member 1	Cytokine_Receptors
<i>NR3C2</i>	nuclear receptor subfamily 3 group C member 2	Cytokine_Receptors
<i>NR4A1</i>	nuclear receptor subfamily 4 group A member 1	Cytokine_Receptors
<i>NR4A2</i>	nuclear receptor subfamily 4 group A member 2	Cytokine_Receptors
<i>NR4A3</i>	nuclear receptor subfamily 4 group A member 3	Cytokine_Receptors
<i>NR5A1</i>	nuclear receptor subfamily 5 group A member 1	Cytokine_Receptors
<i>NR5A2</i>	nuclear receptor subfamily 5 group A member 2	Cytokine_Receptors
<i>NR6A1</i>	nuclear receptor subfamily 6 group A member 1	Cytokine_Receptors
<i>NRP1</i>	neuropilin 1	Cytokine_Receptors
<i>NRP2</i>	neuropilin 2	Cytokine_Receptors
<i>OGFR</i>	opioid growth factor receptor	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>OPRD1</i>	opioid receptor delta 1	Cytokine_Receptors
<i>OPRK1</i>	opioid receptor kappa 1	Cytokine_Receptors
<i>OPRL1</i>	opioid related nociceptin receptor 1	Cytokine_Receptors
<i>OPRM1</i>	opioid receptor mu 1	Cytokine_Receptors
<i>OSMR</i>	oncostatin M receptor	Cytokine_Receptors
<i>OXTR</i>	oxytocin receptor	Cytokine_Receptors
<i>PGR</i>	progesterone receptor	Cytokine_Receptors
<i>PGRMC2</i>	progesterone receptor membrane component 2	Cytokine_Receptors
<i>PLAUR</i>	plasminogen activator, urokinase receptor	Cytokine_Receptors
<i>PLXNA1</i>	plexin A1	Cytokine_Receptors
<i>PLXNA2</i>	plexin A2	Cytokine_Receptors
<i>PLXNA3</i>	plexin A3	Cytokine_Receptors
<i>PLXNA4</i>	plexin A4	Cytokine_Receptors
<i>PLXNB1</i>	plexin B1	Cytokine_Receptors
<i>PLXNB2</i>	plexin B2	Cytokine_Receptors
<i>PLXNB3</i>	plexin B3	Cytokine_Receptors
<i>PLXNC1</i>	plexin C1	Cytokine_Receptors
<i>PLXND1</i>	plexin D1	Cytokine_Receptors
<i>PPARA</i>	peroxisome proliferator activated receptor alpha	Cytokine_Receptors
<i>PPARD</i>	peroxisome proliferator activated receptor delta	Cytokine_Receptors
<i>PPARG</i>	peroxisome proliferator activated receptor gamma	Cytokine_Receptors
<i>PRLHR</i>	prolactin releasing hormone receptor	Cytokine_Receptors
<i>PRLR</i>	prolactin receptor	Cytokine_Receptors
<i>PTAFR</i>	platelet activating factor receptor	Cytokine_Receptors
<i>PTGDR</i>	prostaglandin D2 receptor	Cytokine_Receptors
<i>PTGDS</i>	prostaglandin D2 synthase	Cytokine_Receptors
<i>PTGER1</i>	prostaglandin E receptor 1	Cytokine_Receptors
<i>PTGER2</i>	prostaglandin E receptor 2	Cytokine_Receptors
<i>PTGER3</i>	prostaglandin E receptor 3	Cytokine_Receptors
<i>PTGER4</i>	prostaglandin E receptor 4	Cytokine_Receptors
<i>PTGFR</i>	prostaglandin F receptor	Cytokine_Receptors
<i>PTH1R</i>	parathyroid hormone 1 receptor	Cytokine_Receptors
<i>PTH2R</i>	parathyroid hormone 2 receptor	Cytokine_Receptors
<i>RARA</i>	retinoic acid receptor alpha	Cytokine_Receptors
<i>RARB</i>	retinoic acid receptor beta	Cytokine_Receptors
<i>RARG</i>	retinoic acid receptor gamma	Cytokine_Receptors
<i>ROBO1</i>	roundabout guidance receptor 1	Cytokine_Receptors
<i>ROBO2</i>	roundabout guidance receptor 2	Cytokine_Receptors
<i>ROBO3</i>	roundabout guidance receptor 3	Cytokine_Receptors
<i>RORA</i>	RAR related orphan receptor A	Cytokine_Receptors
<i>RORB</i>	RAR related orphan receptor B	Cytokine_Receptors
<i>RORC</i>	RAR related orphan receptor C	Cytokine_Receptors
<i>RXFP1</i>	relaxin family peptide receptor 1	Cytokine_Receptors
<i>RXFP2</i>	relaxin family peptide receptor 2	Cytokine_Receptors
<i>RXFP3</i>	relaxin family peptide receptor 3	Cytokine_Receptors
<i>RXRA</i>	retinoid X receptor alpha	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>RXRB</i>	retinoid X receptor beta	Cytokine_Receptors
<i>RXRG</i>	retinoid X receptor gamma	Cytokine_Receptors
<i>S1PR1</i>	sphingosine-1-phosphate receptor 1	Cytokine_Receptors
<i>S1PR2</i>	sphingosine-1-phosphate receptor 2	Cytokine_Receptors
<i>SCTR</i>	secretin receptor	Cytokine_Receptors
<i>SDC1</i>	syndecan 1	Cytokine_Receptors
<i>SDC2</i>	syndecan 2	Cytokine_Receptors
<i>SDC3</i>	syndecan 3	Cytokine_Receptors
<i>SDC4</i>	syndecan 4	Cytokine_Receptors
<i>SORT1</i>	sortilin 1	Cytokine_Receptors
<i>SSTR1</i>	somatostatin receptor 1	Cytokine_Receptors
<i>SSTR2</i>	somatostatin receptor 2	Cytokine_Receptors
<i>SSTR5</i>	somatostatin receptor 5	Cytokine_Receptors
<i>ST2</i>	-	Cytokine_Receptors
<i>TACR1</i>	tachykinin receptor 1	Cytokine_Receptors
<i>TEK</i>	TEK receptor tyrosine kinase	Cytokine_Receptors
<i>TGFB1</i>	transforming growth factor beta receptor 1	Cytokine_Receptors
<i>TGFB2</i>	transforming growth factor beta receptor 2	Cytokine_Receptors
<i>TGFB3</i>	transforming growth factor beta receptor 3	Cytokine_Receptors
<i>THRA</i>	thyroid hormone receptor alpha	Cytokine_Receptors
<i>THRB</i>	thyroid hormone receptor beta	Cytokine_Receptors
<i>TIE1</i>	tyrosine kinase with immunoglobulin like and EGF like domains 1	Cytokine_Receptors
<i>TNFRSF10A</i>	TNF receptor superfamily member 10a	Cytokine_Receptors
<i>TNFRSF10B</i>	TNF receptor superfamily member 10b	Cytokine_Receptors
<i>TNFRSF10C</i>	TNF receptor superfamily member 10c	Cytokine_Receptors
<i>TNFRSF10D</i>	TNF receptor superfamily member 10d	Cytokine_Receptors
<i>TNFRSF11A</i>	TNF receptor superfamily member 11a	Cytokine_Receptors
<i>TNFRSF12A</i>	TNF receptor superfamily member 12A	Cytokine_Receptors
<i>TNFRSF13B</i>	TNF receptor superfamily member 13B	Cytokine_Receptors
<i>TNFRSF13C</i>	TNF receptor superfamily member 13C	Cytokine_Receptors
<i>TNFRSF14</i>	TNF receptor superfamily member 14	Cytokine_Receptors
<i>TNFRSF17</i>	TNF receptor superfamily member 17	Cytokine_Receptors
<i>TNFRSF18</i>	TNF receptor superfamily member 18	Cytokine_Receptors
<i>TNFRSF19</i>	TNF receptor superfamily member 19	Cytokine_Receptors
<i>TNFRSF1A</i>	TNF receptor superfamily member 1A	Cytokine_Receptors
<i>TNFRSF1B</i>	TNF receptor superfamily member 1B	Cytokine_Receptors
<i>TNFRSF21</i>	TNF receptor superfamily member 21	Cytokine_Receptors
<i>TNFRSF25</i>	TNF receptor superfamily member 25	Cytokine_Receptors
<i>TNFRSF4</i>	TNF receptor superfamily member 4	Cytokine_Receptors
<i>TNFRSF6B</i>	TNF receptor superfamily member 6b	Cytokine_Receptors
<i>TNFRSF8</i>	TNF receptor superfamily member 8	Cytokine_Receptors
<i>TNFRSF9</i>	TNF receptor superfamily member 9	Cytokine_Receptors
<i>TRHR</i>	thyrotropin releasing hormone receptor	Cytokine_Receptors
<i>TSHR</i>	thyroid stimulating hormone receptor	Cytokine_Receptors
<i>TUBB3</i>	tubulin beta 3 class III	Cytokine_Receptors

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>VDR</i>	vitamin D receptor	Cytokine_Receptors
<i>VIPR1</i>	vasoactive intestinal peptide receptor 1	Cytokine_Receptors
<i>VIPR2</i>	vasoactive intestinal peptide receptor 2	Cytokine_Receptors
<i>XCR1</i>	X-C motif chemokine receptor 1	Cytokine_Receptors
<i>IFNA10</i>	interferon alpha 10	Interferons
<i>IFNA13</i>	interferon alpha 13	Interferons
<i>IFNA14</i>	interferon alpha 14	Interferons
<i>IFNA16</i>	interferon alpha 16	Interferons
<i>IFNA17</i>	interferon alpha 17	Interferons
<i>IFNA2</i>	interferon alpha 2	Interferons
<i>IFNA21</i>	interferon alpha 21	Interferons
<i>IFNA4</i>	interferon alpha 4	Interferons
<i>IFNA5</i>	interferon alpha 5	Interferons
<i>IFNA6</i>	interferon alpha 6	Interferons
<i>IFNA7</i>	interferon alpha 7	Interferons
<i>IFNA8</i>	interferon alpha 8	Interferons
<i>IFNB1</i>	interferon beta 1	Interferons
<i>IFNE</i>	interferon epsilon	Interferons
<i>IFNG</i>	interferon gamma	Interferons
<i>IFNK</i>	interferon kappa	Interferons
<i>IFNW1</i>	interferon omega 1	Interferons
<i>IFNAR2</i>	interferon alpha and beta receptor subunit 2	Interferon_Receptor
<i>IFNGR1</i>	interferon gamma receptor 1	Interferon_Receptor
<i>IFNGR2</i>	interferon gamma receptor 2	Interferon_Receptor
<i>IL11</i>	interleukin 11	Interleukins
<i>IL12A</i>	interleukin 12A	Interleukins
<i>IL12B</i>	interleukin 12B	Interleukins
<i>IL13</i>	interleukin 13	Interleukins
<i>IL15</i>	interleukin 15	Interleukins
<i>IL16</i>	interleukin 16	Interleukins
<i>IL17A</i>	interleukin 17A	Interleukins
<i>IL17B</i>	interleukin 17B	Interleukins
<i>IL17C</i>	interleukin 17C	Interleukins
<i>IL17D</i>	interleukin 17D	Interleukins
<i>IL17F</i>	interleukin 17F	Interleukins
<i>IL18</i>	interleukin 18	Interleukins
<i>IL19</i>	interleukin 19	Interleukins
<i>IL1A</i>	interleukin 1 alpha	Interleukins
<i>IL1B</i>	interleukin 1 beta	Interleukins
<i>IL1F10</i>	interleukin 1 family member 10	Interleukins
<i>IL36RN</i>	interleukin 36 receptor antagonist	Interleukins
<i>IL36A</i>	interleukin 36 alpha	Interleukins
<i>IL37</i>	interleukin 37	Interleukins
<i>IL36B</i>	interleukin 36 beta	Interleukins
<i>IL36G</i>	interleukin 36 gamma	Interleukins
<i>IL1RN</i>	interleukin 1 receptor antagonist	Interleukins

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IL2</i>	interleukin 2	Interleukins
<i>IL20</i>	interleukin 20	Interleukins
<i>IL21</i>	interleukin 21	Interleukins
<i>IL22</i>	interleukin 22	Interleukins
<i>IL23A</i>	interleukin 23 subunit alpha	Interleukins
<i>IL24</i>	interleukin 24	Interleukins
<i>IL25</i>	interleukin 25	Interleukins
<i>IL26</i>	interleukin 26	Interleukins
<i>IL27</i>	interleukin 27	Interleukins
<i>IFNL2</i>	interferon lambda 2	Interleukins
<i>IFNL3</i>	interferon lambda 3	Interleukins
<i>IFNL1</i>	interferon lambda 1	Interleukins
<i>IL3</i>	interleukin 3	Interleukins
<i>IL31</i>	interleukin 31	Interleukins
<i>IL32</i>	interleukin 32	Interleukins
<i>IL33</i>	interleukin 33	Interleukins
<i>IL34</i>	interleukin 34	Interleukins
<i>IL4</i>	interleukin 4	Interleukins
<i>IL5</i>	interleukin 5	Interleukins
<i>IL6</i>	interleukin 6	Interleukins
<i>IL6ST</i>	interleukin 6 signal transducer	Interleukins
<i>IL7</i>	interleukin 7	Interleukins
<i>CXCL8</i>	C-X-C motif chemokine ligand 8	Interleukins
<i>IL9</i>	interleukin 9	Interleukins
<i>TXLNA</i>	taxilin alpha	Interleukins
<i>IL10RA</i>	interleukin 10 receptor subunit alpha	Interleukins_Receptor
<i>IL10RB</i>	interleukin 10 receptor subunit beta	Interleukins_Receptor
<i>IL11RA</i>	interleukin 11 receptor subunit alpha	Interleukins_Receptor
<i>IL12RB1</i>	interleukin 12 receptor subunit beta 1	Interleukins_Receptor
<i>IL12RB2</i>	interleukin 12 receptor subunit beta 2	Interleukins_Receptor
<i>IL13RA1</i>	interleukin 13 receptor subunit alpha 1	Interleukins_Receptor
<i>IL13RA2</i>	interleukin 13 receptor subunit alpha 2	Interleukins_Receptor
<i>IL15RA</i>	interleukin 15 receptor subunit alpha	Interleukins_Receptor
<i>IL2RB</i>	interleukin 2 receptor subunit beta	Interleukins_Receptor
<i>IL17RA</i>	interleukin 17 receptor A	Interleukins_Receptor
<i>IL17RB</i>	interleukin 17 receptor B	Interleukins_Receptor
<i>IL17RC</i>	interleukin 17 receptor C	Interleukins_Receptor
<i>IL17RD</i>	interleukin 17 receptor D	Interleukins_Receptor
<i>IL17RE</i>	interleukin 17 receptor E	Interleukins_Receptor
<i>IL18R1</i>	interleukin 18 receptor 1	Interleukins_Receptor
<i>IL18RAP</i>	interleukin 18 receptor accessory protein	Interleukins_Receptor
<i>IL1R1</i>	interleukin 1 receptor type 1	Interleukins_Receptor
<i>IL1R2</i>	interleukin 1 receptor type 2	Interleukins_Receptor
<i>IL1RAP</i>	interleukin 1 receptor accessory protein	Interleukins_Receptor
<i>IL1RL1</i>	interleukin 1 receptor like 1	Interleukins_Receptor
<i>IL1RL2</i>	interleukin 1 receptor like 2	Interleukins_Receptor

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IL20RA</i>	interleukin 20 receptor subunit alpha	Interleukins_Receptor
<i>IL20RB</i>	interleukin 20 receptor subunit beta	Interleukins_Receptor
<i>IL21R</i>	interleukin 21 receptor	Interleukins_Receptor
<i>IL22RA1</i>	interleukin 22 receptor subunit alpha 1	Interleukins_Receptor
<i>IL22RA2</i>	interleukin 22 receptor subunit alpha 2	Interleukins_Receptor
<i>IL23R</i>	interleukin 23 receptor	Interleukins_Receptor
<i>IL27RA</i>	interleukin 27 receptor subunit alpha	Interleukins_Receptor
<i>IFNLR1</i>	interferon lambda receptor 1	Interleukins_Receptor
<i>IL2RA</i>	interleukin 2 receptor subunit alpha	Interleukins_Receptor
<i>IL2RB</i>	interleukin 2 receptor subunit beta	Interleukins_Receptor
<i>IL2RG</i>	interleukin 2 receptor subunit gamma	Interleukins_Receptor
<i>IL31RA</i>	interleukin 31 receptor A	Interleukins_Receptor
<i>IL3RA</i>	interleukin 3 receptor subunit alpha	Interleukins_Receptor
<i>IL4R</i>	interleukin 4 receptor	Interleukins_Receptor
<i>IL5RA</i>	interleukin 5 receptor subunit alpha	Interleukins_Receptor
<i>IL6R</i>	interleukin 6 receptor	Interleukins_Receptor
<i>IL7R</i>	interleukin 7 receptor	Interleukins_Receptor
<i>CXCR1</i>	C-X-C motif chemokine receptor 1	Interleukins_Receptor
<i>CXCR2</i>	C-X-C motif chemokine receptor 2	Interleukins_Receptor
<i>IL9R</i>	interleukin 9 receptor	Interleukins_Receptor
<i>ST2</i>	-	Interleukins_Receptor
<i>HLA-A</i>	major histocompatibility complex, class I, A	NaturalKiller_Cell_Cytotoxicity
<i>HLA-B</i>	major histocompatibility complex, class I, B	NaturalKiller_Cell_Cytotoxicity
<i>HLA-C</i>	major histocompatibility complex, class I, C	NaturalKiller_Cell_Cytotoxicity
<i>HLA-E</i>	major histocompatibility complex, class I, E	NaturalKiller_Cell_Cytotoxicity
<i>HLA-G</i>	major histocompatibility complex, class I, G	NaturalKiller_Cell_Cytotoxicity
<i>KIR3DL1</i>	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1	NaturalKiller_Cell_Cytotoxicity
<i>KIR3DL2</i>	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 2	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DL1</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 1	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DL2</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DL3</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 3	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DL4</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DL5A</i>	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 5A	NaturalKiller_Cell_Cytotoxicity
<i>KLRC1</i>	killer cell lectin like receptor C1	NaturalKiller_Cell_Cytotoxicity
<i>KLRC2</i>	killer cell lectin like receptor C2	NaturalKiller_Cell_Cytotoxicity
<i>KLRC3</i>	killer cell lectin like receptor C3	NaturalKiller_Cell_Cytotoxicity
<i>KLRD1</i>	killer cell lectin like receptor D1	NaturalKiller_Cell_Cytotoxicity
<i>PTPN6</i>	protein tyrosine phosphatase non-receptor type 6	NaturalKiller_Cell_Cytotoxicity
<i>PTPN11</i>	protein tyrosine phosphatase non-receptor type 11	NaturalKiller_Cell_Cytotoxicity
<i>ICAM1</i>	intercellular adhesion molecule 1	NaturalKiller_Cell_Cytotoxicity
<i>ICAM2</i>	intercellular adhesion molecule 2	NaturalKiller_Cell_Cytotoxicity

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>ITGAL</i>	integrin subunit alpha L	NaturalKiller_Cell_Cytotoxicity
<i>ITGB2</i>	integrin subunit beta 2	NaturalKiller_Cell_Cytotoxicity
<i>PTK2B</i>	protein tyrosine kinase 2 beta	NaturalKiller_Cell_Cytotoxicity
<i>VAV3</i>	vav guanine nucleotide exchange factor 3	NaturalKiller_Cell_Cytotoxicity
<i>VAV1</i>	vav guanine nucleotide exchange factor 1	NaturalKiller_Cell_Cytotoxicity
<i>VAV2</i>	vav guanine nucleotide exchange factor 2	NaturalKiller_Cell_Cytotoxicity
<i>RAC1</i>	Rac family small GTPase 1	NaturalKiller_Cell_Cytotoxicity
<i>RAC2</i>	Rac family small GTPase 2	NaturalKiller_Cell_Cytotoxicity
<i>RAC3</i>	Rac family small GTPase 3	NaturalKiller_Cell_Cytotoxicity
<i>PAK1</i>	p21 (RAC1) activated kinase 1	NaturalKiller_Cell_Cytotoxicity
<i>MAP2K1</i>	mitogen-activated protein kinase kinase 1	NaturalKiller_Cell_Cytotoxicity
<i>MAP2K2</i>	mitogen-activated protein kinase kinase 2	NaturalKiller_Cell_Cytotoxicity
<i>MAPK1</i>	mitogen-activated protein kinase 1	NaturalKiller_Cell_Cytotoxicity
<i>MAPK3</i>	mitogen-activated protein kinase 3	NaturalKiller_Cell_Cytotoxicity
<i>TNF</i>	tumor necrosis factor	NaturalKiller_Cell_Cytotoxicity
<i>CSF2</i>	colony stimulating factor 2	NaturalKiller_Cell_Cytotoxicity
<i>IFNG</i>	interferon gamma	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DS1</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 1	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DS3</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DS4</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4	NaturalKiller_Cell_Cytotoxicity
<i>KIR2DS5</i>	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 5	NaturalKiller_Cell_Cytotoxicity
<i>NCR2</i>	natural cytotoxicity triggering receptor 2	NaturalKiller_Cell_Cytotoxicity
<i>TYROBP</i>	transmembrane immune signaling adaptor TYROBP	NaturalKiller_Cell_Cytotoxicity
<i>LCK</i>	LCK proto-oncogene, Src family tyrosine kinase	NaturalKiller_Cell_Cytotoxicity
<i>FCGR3A</i>	Fc fragment of IgG receptor IIIa	NaturalKiller_Cell_Cytotoxicity
<i>FCGR3B</i>	Fc fragment of IgG receptor IIIb	NaturalKiller_Cell_Cytotoxicity
<i>NCR1</i>	natural cytotoxicity triggering receptor 1	NaturalKiller_Cell_Cytotoxicity
<i>NCR3</i>	natural cytotoxicity triggering receptor 3	NaturalKiller_Cell_Cytotoxicity
<i>FCER1G</i>	Fc fragment of IgE receptor Ig	NaturalKiller_Cell_Cytotoxicity
<i>CD247</i>	CD247 molecule	NaturalKiller_Cell_Cytotoxicity
<i>ZAP70</i>	zeta chain of T cell receptor associated protein kinase 70	NaturalKiller_Cell_Cytotoxicity
<i>SYK</i>	spleen associated tyrosine kinase	NaturalKiller_Cell_Cytotoxicity
<i>LCP2</i>	lymphocyte cytosolic protein 2	NaturalKiller_Cell_Cytotoxicity
<i>LAT</i>	linker for activation of T cells	NaturalKiller_Cell_Cytotoxicity
<i>PLCG1</i>	phospholipase C gamma 1	NaturalKiller_Cell_Cytotoxicity
<i>PLCG2</i>	phospholipase C gamma 2	NaturalKiller_Cell_Cytotoxicity
<i>SH3BP2</i>	SH3 domain binding protein 2	NaturalKiller_Cell_Cytotoxicity
<i>PIK3CA</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	NaturalKiller_Cell_Cytotoxicity
<i>PIK3CB</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	NaturalKiller_Cell_Cytotoxicity
<i>PIK3CD</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	NaturalKiller_Cell_Cytotoxicity

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>PIK3CG</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	NaturalKiller_Cell_Cytotoxicity
<i>PIK3R5</i>	phosphoinositide-3-kinase regulatory subunit 5	NaturalKiller_Cell_Cytotoxicity
<i>PIK3R1</i>	phosphoinositide-3-kinase regulatory subunit 1	NaturalKiller_Cell_Cytotoxicity
<i>PIK3R2</i>	phosphoinositide-3-kinase regulatory subunit 2	NaturalKiller_Cell_Cytotoxicity
<i>PIK3R3</i>	phosphoinositide-3-kinase regulatory subunit 3	NaturalKiller_Cell_Cytotoxicity
<i>FYN</i>	FYN proto-oncogene, Src family tyrosine kinase	NaturalKiller_Cell_Cytotoxicity
<i>SHC2</i>	SHC adaptor protein 2	NaturalKiller_Cell_Cytotoxicity
<i>SHC4</i>	SHC adaptor protein 4	NaturalKiller_Cell_Cytotoxicity
<i>SHC3</i>	SHC adaptor protein 3	NaturalKiller_Cell_Cytotoxicity
<i>SHC1</i>	SHC adaptor protein 1	NaturalKiller_Cell_Cytotoxicity
<i>GRB2</i>	growth factor receptor bound protein 2	NaturalKiller_Cell_Cytotoxicity
<i>SOS1</i>	SOS Ras/Rac guanine nucleotide exchange factor 1	NaturalKiller_Cell_Cytotoxicity
<i>SOS2</i>	SOS Ras/Rho guanine nucleotide exchange factor 2	NaturalKiller_Cell_Cytotoxicity
<i>HRAS</i>	HRas proto-oncogene, GTPase	NaturalKiller_Cell_Cytotoxicity
<i>KRAS</i>	KRAS proto-oncogene, GTPase	NaturalKiller_Cell_Cytotoxicity
<i>NRAS</i>	NRAS proto-oncogene, GTPase	NaturalKiller_Cell_Cytotoxicity
<i>ARAF</i>	A-Raf proto-oncogene, serine/threonine kinase	NaturalKiller_Cell_Cytotoxicity
<i>BRAF</i>	B-Raf proto-oncogene, serine/threonine kinase	NaturalKiller_Cell_Cytotoxicity
<i>RAF1</i>	Raf-1 proto-oncogene, serine/threonine kinase	NaturalKiller_Cell_Cytotoxicity
<i>MICA</i>	MHC class I polypeptide-related sequence A	NaturalKiller_Cell_Cytotoxicity
<i>MICB</i>	MHC class I polypeptide-related sequence B	NaturalKiller_Cell_Cytotoxicity
<i>ULBP3</i>	UL16 binding protein 3	NaturalKiller_Cell_Cytotoxicity
<i>ULBP2</i>	UL16 binding protein 2	NaturalKiller_Cell_Cytotoxicity
<i>ULBP1</i>	UL16 binding protein 1	NaturalKiller_Cell_Cytotoxicity
<i>KLRK1</i>	killer cell lectin like receptor K1	NaturalKiller_Cell_Cytotoxicity
<i>HCST</i>	hematopoietic cell signal transducer	NaturalKiller_Cell_Cytotoxicity
<i>CD48</i>	CD48 molecule	NaturalKiller_Cell_Cytotoxicity
<i>CD244</i>	CD244 molecule	NaturalKiller_Cell_Cytotoxicity
<i>PPP3CA</i>	protein phosphatase 3 catalytic subunit alpha	NaturalKiller_Cell_Cytotoxicity
<i>PPP3CB</i>	protein phosphatase 3 catalytic subunit beta	NaturalKiller_Cell_Cytotoxicity
<i>PPP3CC</i>	protein phosphatase 3 catalytic subunit gamma	NaturalKiller_Cell_Cytotoxicity
<i>CHP1</i>	calcineurin like EF-hand protein 1	NaturalKiller_Cell_Cytotoxicity
<i>PPP3R1</i>	protein phosphatase 3 regulatory subunit B, alpha	NaturalKiller_Cell_Cytotoxicity
<i>PPP3R2</i>	protein phosphatase 3 regulatory subunit B, beta	NaturalKiller_Cell_Cytotoxicity
<i>CHP2</i>	calcineurin like EF-hand protein 2	NaturalKiller_Cell_Cytotoxicity
<i>NFAT5</i>	nuclear factor of activated T cells 5	NaturalKiller_Cell_Cytotoxicity
<i>NFATC1</i>	nuclear factor of activated T cells 1	NaturalKiller_Cell_Cytotoxicity
<i>NFATC2</i>	nuclear factor of activated T cells 2	NaturalKiller_Cell_Cytotoxicity
<i>NFATC3</i>	nuclear factor of activated T cells 3	NaturalKiller_Cell_Cytotoxicity
<i>NFATC4</i>	nuclear factor of activated T cells 4	NaturalKiller_Cell_Cytotoxicity
<i>PRKCA</i>	protein kinase C alpha	NaturalKiller_Cell_Cytotoxicity
<i>PRKCB</i>	protein kinase C beta	NaturalKiller_Cell_Cytotoxicity
<i>PRKCG</i>	protein kinase C gamma	NaturalKiller_Cell_Cytotoxicity
<i>SH2D1B</i>	SH2 domain containing 1B	NaturalKiller_Cell_Cytotoxicity
<i>SH2D1A</i>	SH2 domain containing 1A	NaturalKiller_Cell_Cytotoxicity

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>IFNGR1</i>	interferon gamma receptor 1	NaturalKiller_Cell_Cytotoxicity
<i>IFNGR2</i>	interferon gamma receptor 2	NaturalKiller_Cell_Cytotoxicity
<i>IFNA1</i>	interferon alpha 1	NaturalKiller_Cell_Cytotoxicity
<i>IFNA2</i>	interferon alpha 2	NaturalKiller_Cell_Cytotoxicity
<i>IFNA4</i>	interferon alpha 4	NaturalKiller_Cell_Cytotoxicity
<i>IFNA5</i>	interferon alpha 5	NaturalKiller_Cell_Cytotoxicity
<i>IFNA6</i>	interferon alpha 6	NaturalKiller_Cell_Cytotoxicity
<i>IFNA7</i>	interferon alpha 7	NaturalKiller_Cell_Cytotoxicity
<i>IFNA8</i>	interferon alpha 8	NaturalKiller_Cell_Cytotoxicity
<i>IFNA10</i>	interferon alpha 10	NaturalKiller_Cell_Cytotoxicity
<i>IFNA13</i>	interferon alpha 13	NaturalKiller_Cell_Cytotoxicity
<i>IFNA14</i>	interferon alpha 14	NaturalKiller_Cell_Cytotoxicity
<i>IFNA16</i>	interferon alpha 16	NaturalKiller_Cell_Cytotoxicity
<i>IFNA17</i>	interferon alpha 17	NaturalKiller_Cell_Cytotoxicity
<i>IFNA21</i>	interferon alpha 21	NaturalKiller_Cell_Cytotoxicity
<i>IFNB1</i>	interferon beta 1	NaturalKiller_Cell_Cytotoxicity
<i>IFNAR1</i>	interferon alpha and beta receptor subunit 1	NaturalKiller_Cell_Cytotoxicity
<i>IFNAR2</i>	interferon alpha and beta receptor subunit 2	NaturalKiller_Cell_Cytotoxicity
<i>TNFSF10</i>	TNF superfamily member 10	NaturalKiller_Cell_Cytotoxicity
<i>TNFRSF10D</i>	TNF receptor superfamily member 10d	NaturalKiller_Cell_Cytotoxicity
<i>TNFRSF10C</i>	TNF receptor superfamily member 10c	NaturalKiller_Cell_Cytotoxicity
<i>TNFRSF10B</i>	TNF receptor superfamily member 10b	NaturalKiller_Cell_Cytotoxicity
<i>TNFRSF10A</i>	TNF receptor superfamily member 10a	NaturalKiller_Cell_Cytotoxicity
<i>FASLG</i>	Fas ligand	NaturalKiller_Cell_Cytotoxicity
<i>FAS</i>	Fas cell surface death receptor	NaturalKiller_Cell_Cytotoxicity
<i>GZMB</i>	granzyme B	NaturalKiller_Cell_Cytotoxicity
<i>PRF1</i>	perforin 1	NaturalKiller_Cell_Cytotoxicity
<i>CASP3</i>	caspase 3	NaturalKiller_Cell_Cytotoxicity
<i>BID</i>	BH3 interacting domain death agonist	NaturalKiller_Cell_Cytotoxicity
<i>CD3D</i>	CD3d molecule	TCRsignalingPathway
<i>CD3E</i>	CD3e molecule	TCRsignalingPathway
<i>CD3G</i>	CD3g molecule	TCRsignalingPathway
<i>CD247</i>	CD247 molecule	TCRsignalingPathway
<i>CD4</i>	CD4 molecule	TCRsignalingPathway
<i>CD8A</i>	CD8a molecule	TCRsignalingPathway
<i>CD8B</i>	CD8b molecule	TCRsignalingPathway
<i>PTPRC</i>	protein tyrosine phosphatase receptor type C	TCRsignalingPathway
<i>LCK</i>	LCK proto-oncogene, Src family tyrosine kinase	TCRsignalingPathway
<i>FYN</i>	FYN proto-oncogene, Src family tyrosine kinase	TCRsignalingPathway
<i>ZAP70</i>	zeta chain of T cell receptor associated protein kinase 70	TCRsignalingPathway
<i>LCP2</i>	lymphocyte cytosolic protein 2	TCRsignalingPathway
<i>LAT</i>	linker for activation of T cells	TCRsignalingPathway
<i>ITK</i>	IL2 inducible T cell kinase	TCRsignalingPathway
<i>TEC</i>	tec protein tyrosine kinase	TCRsignalingPathway
<i>NCK1</i>	NCK adaptor protein 1	TCRsignalingPathway
<i>NCK2</i>	NCK adaptor protein 2	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
VAV3	vav guanine nucleotide exchange factor 3	TCRsignalingPathway
VAV1	vav guanine nucleotide exchange factor 1	TCRsignalingPathway
VAV2	vav guanine nucleotide exchange factor 2	TCRsignalingPathway
GRAP2	GRB2 related adaptor protein 2	TCRsignalingPathway
GRB2	growth factor receptor bound protein 2	TCRsignalingPathway
PAK1	p21 (RAC1) activated kinase 1	TCRsignalingPathway
PAK2	p21 (RAC1) activated kinase 2	TCRsignalingPathway
PAK3	p21 (RAC1) activated kinase 3	TCRsignalingPathway
PAK4	p21 (RAC1) activated kinase 4	TCRsignalingPathway
PAK6	p21 (RAC1) activated kinase 6	TCRsignalingPathway
PAK5	p21 (RAC1) activated kinase 5	TCRsignalingPathway
RHOA	ras homolog family member A	TCRsignalingPathway
CDC42	cell division cycle 42	TCRsignalingPathway
PPP3CA	protein phosphatase 3 catalytic subunit alpha	TCRsignalingPathway
PPP3CB	protein phosphatase 3 catalytic subunit beta	TCRsignalingPathway
PPP3CC	protein phosphatase 3 catalytic subunit gamma	TCRsignalingPathway
CHP1	calcineurin like EF-hand protein 1	TCRsignalingPathway
PPP3R1	protein phosphatase 3 regulatory subunit B, alpha	TCRsignalingPathway
PPP3R2	protein phosphatase 3 regulatory subunit B, beta	TCRsignalingPathway
CHP2	calcineurin like EF-hand protein 2	TCRsignalingPathway
NFAT5	nuclear factor of activated T cells 5	TCRsignalingPathway
NFATC1	nuclear factor of activated T cells 1	TCRsignalingPathway
NFATC2	nuclear factor of activated T cells 2	TCRsignalingPathway
NFATC3	nuclear factor of activated T cells 3	TCRsignalingPathway
NFATC4	nuclear factor of activated T cells 4	TCRsignalingPathway
SOS1	SOS Ras/Rac guanine nucleotide exchange factor 1	TCRsignalingPathway
SOS2	SOS Ras/Rho guanine nucleotide exchange factor 2	TCRsignalingPathway
HRAS	HRas proto-oncogene, GTPase	TCRsignalingPathway
KRAS	KRAS proto-oncogene, GTPase	TCRsignalingPathway
NRAS	NRAS proto-oncogene, GTPase	TCRsignalingPathway
FOS	Fos proto-oncogene, AP-1 transcription factor subunit	TCRsignalingPathway
JUN	Jun proto-oncogene, AP-1 transcription factor subunit	TCRsignalingPathway
CARD11	caspase recruitment domain family member 11	TCRsignalingPathway
BCL10	BCL10 immune signaling adaptor	TCRsignalingPathway
MALT1	MALT1 paracaspase	TCRsignalingPathway
CHUK	component of inhibitor of nuclear factor kappa B kinase complex	TCRsignalingPathway
IKBKB	inhibitor of nuclear factor kappa B kinase subunit beta	TCRsignalingPathway
IKBKG	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	TCRsignalingPathway
NFKB1	nuclear factor kappa B subunit 1	TCRsignalingPathway
RELA	RELA proto-oncogene, NF-kB subunit	TCRsignalingPathway
NFKBIA	NFKB inhibitor alpha	TCRsignalingPathway
NFKBIB	NFKB inhibitor beta	TCRsignalingPathway
NFKBIE	NFKB inhibitor epsilon	TCRsignalingPathway
CD28	CD28 molecule	TCRsignalingPathway
ICOS	inducible T cell costimulator	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>CD40LG</i>	CD40 ligand	TCRsignalingPathway
<i>PIK3R5</i>	phosphoinositide-3-kinase regulatory subunit 5	TCRsignalingPathway
<i>PIK3R1</i>	phosphoinositide-3-kinase regulatory subunit 1	TCRsignalingPathway
<i>PIK3R2</i>	phosphoinositide-3-kinase regulatory subunit 2	TCRsignalingPathway
<i>PIK3R3</i>	phosphoinositide-3-kinase regulatory subunit 3	TCRsignalingPathway
<i>PIK3CA</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	TCRsignalingPathway
<i>PIK3CB</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	TCRsignalingPathway
<i>PIK3CD</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	TCRsignalingPathway
<i>PIK3CG</i>	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	TCRsignalingPathway
<i>AKT3</i>	AKT serine/threonine kinase 3	TCRsignalingPathway
<i>AKT1</i>	AKT serine/threonine kinase 1	TCRsignalingPathway
<i>AKT2</i>	AKT serine/threonine kinase 2	TCRsignalingPathway
<i>MAP3K8</i>	mitogen-activated protein kinase kinase kinase 8	TCRsignalingPathway
<i>MAP3K14</i>	mitogen-activated protein kinase kinase kinase 14	TCRsignalingPathway
<i>PDCD1</i>	programmed cell death 1	TCRsignalingPathway
<i>CTLA4</i>	cytotoxic T-lymphocyte associated protein 4	TCRsignalingPathway
<i>PTPN6</i>	protein tyrosine phosphatase non-receptor type 6	TCRsignalingPathway
<i>CBLC</i>	Cbl proto-oncogene C	TCRsignalingPathway
<i>CBL</i>	Cbl proto-oncogene	TCRsignalingPathway
<i>CBLB</i>	Cbl proto-oncogene B	TCRsignalingPathway
<i>IL2</i>	interleukin 2	TCRsignalingPathway
<i>IL4</i>	interleukin 4	TCRsignalingPathway
<i>IL5</i>	interleukin 5	TCRsignalingPathway
<i>IL10</i>	interleukin 10	TCRsignalingPathway
<i>IFNG</i>	interferon gamma	TCRsignalingPathway
<i>CSF2</i>	colony stimulating factor 2	TCRsignalingPathway
<i>TNF</i>	tumor necrosis factor	TCRsignalingPathway
<i>CDK4</i>	cyclin dependent kinase 4	TCRsignalingPathway
<i>RASGRP1</i>	RAS guanyl releasing protein 1	TCRsignalingPathway
<i>PDK1</i>	pyruvate dehydrogenase kinase 1	TCRsignalingPathway
<i>PLCG1</i>	phospholipase C gamma 1	TCRsignalingPathway
<i>PRKCQ</i>	protein kinase C theta	TCRsignalingPathway
<i>TRAC</i>	T cell receptor alpha constant	TCRsignalingPathway
<i>TRAJ1</i>	T cell receptor alpha joining 1 (non-functional)	TCRsignalingPathway
<i>TRAJ2</i>	T cell receptor alpha joining 2 (non-functional)	TCRsignalingPathway
<i>TRAJ3</i>	T cell receptor alpha joining 3	TCRsignalingPathway
<i>TRAJ4</i>	T cell receptor alpha joining 4	TCRsignalingPathway
<i>TRAJ5</i>	T cell receptor alpha joining 5	TCRsignalingPathway
<i>TRAJ6</i>	T cell receptor alpha joining 6	TCRsignalingPathway
<i>TRAJ7</i>	T cell receptor alpha joining 7	TCRsignalingPathway
<i>TRAJ8</i>	T cell receptor alpha joining 8	TCRsignalingPathway
<i>TRAJ9</i>	T cell receptor alpha joining 9	TCRsignalingPathway
<i>TRAJ10</i>	T cell receptor alpha joining 10	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TRAJ11</i>	T cell receptor alpha joining 11	TCRsignalingPathway
<i>TRAJ12</i>	T cell receptor alpha joining 12	TCRsignalingPathway
<i>TRAJ13</i>	T cell receptor alpha joining 13	TCRsignalingPathway
<i>TRAJ14</i>	T cell receptor alpha joining 14	TCRsignalingPathway
<i>TRAJ15</i>	T cell receptor alpha joining 15	TCRsignalingPathway
<i>TRAJ16</i>	T cell receptor alpha joining 16	TCRsignalingPathway
<i>TRAJ17</i>	T cell receptor alpha joining 17	TCRsignalingPathway
<i>TRAJ18</i>	T cell receptor alpha joining 18	TCRsignalingPathway
<i>TRAJ19</i>	T cell receptor alpha joining 19 (non-functional)	TCRsignalingPathway
<i>TRAJ20</i>	T cell receptor alpha joining 20	TCRsignalingPathway
<i>TRAJ21</i>	T cell receptor alpha joining 21	TCRsignalingPathway
<i>TRAJ22</i>	T cell receptor alpha joining 22	TCRsignalingPathway
<i>TRAJ23</i>	T cell receptor alpha joining 23	TCRsignalingPathway
<i>TRAJ24</i>	T cell receptor alpha joining 24	TCRsignalingPathway
<i>TRAJ25</i>	T cell receptor alpha joining 25 (non-functional)	TCRsignalingPathway
<i>TRAJ26</i>	T cell receptor alpha joining 26	TCRsignalingPathway
<i>TRAJ27</i>	T cell receptor alpha joining 27	TCRsignalingPathway
<i>TRAJ28</i>	T cell receptor alpha joining 28	TCRsignalingPathway
<i>TRAJ29</i>	T cell receptor alpha joining 29	TCRsignalingPathway
<i>TRAJ30</i>	T cell receptor alpha joining 30	TCRsignalingPathway
<i>TRAJ31</i>	T cell receptor alpha joining 31	TCRsignalingPathway
<i>TRAJ32</i>	T cell receptor alpha joining 32	TCRsignalingPathway
<i>TRAJ33</i>	T cell receptor alpha joining 33	TCRsignalingPathway
<i>TRAJ34</i>	T cell receptor alpha joining 34	TCRsignalingPathway
<i>TRAJ35</i>	T cell receptor alpha joining 35 (non-functional)	TCRsignalingPathway
<i>TRAJ36</i>	T cell receptor alpha joining 36	TCRsignalingPathway
<i>TRAJ37</i>	T cell receptor alpha joining 37	TCRsignalingPathway
<i>TRAJ38</i>	T cell receptor alpha joining 38	TCRsignalingPathway
<i>TRAJ39</i>	T cell receptor alpha joining 39	TCRsignalingPathway
<i>TRAJ40</i>	T cell receptor alpha joining 40	TCRsignalingPathway
<i>TRAJ41</i>	T cell receptor alpha joining 41	TCRsignalingPathway
<i>TRAJ42</i>	T cell receptor alpha joining 42	TCRsignalingPathway
<i>TRAJ43</i>	T cell receptor alpha joining 43	TCRsignalingPathway
<i>TRAJ44</i>	T cell receptor alpha joining 44	TCRsignalingPathway
<i>TRAJ45</i>	T cell receptor alpha joining 45	TCRsignalingPathway
<i>TRAJ46</i>	T cell receptor alpha joining 46	TCRsignalingPathway
<i>TRAJ47</i>	T cell receptor alpha joining 47	TCRsignalingPathway
<i>TRAJ48</i>	T cell receptor alpha joining 48	TCRsignalingPathway
<i>TRAJ49</i>	T cell receptor alpha joining 49	TCRsignalingPathway
<i>TRAJ50</i>	T cell receptor alpha joining 50	TCRsignalingPathway
<i>TRAJ52</i>	T cell receptor alpha joining 52	TCRsignalingPathway
<i>TRAJ53</i>	T cell receptor alpha joining 53	TCRsignalingPathway
<i>TRAJ54</i>	T cell receptor alpha joining 54	TCRsignalingPathway
<i>TRAJ56</i>	T cell receptor alpha joining 56	TCRsignalingPathway
<i>TRAJ57</i>	T cell receptor alpha joining 57	TCRsignalingPathway
<i>TRAJ58</i>	T cell receptor alpha joining 58 (non-functional)	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TRAJ59</i>	T cell receptor alpha joining 59 (non-functional)	TCRsignalingPathway
<i>TRAJ61</i>	T cell receptor alpha joining 61 (non-functional)	TCRsignalingPathway
<i>TRAV1-1</i>	T cell receptor alpha variable 1-1	TCRsignalingPathway
<i>TRAV1-2</i>	T cell receptor alpha variable 1-2	TCRsignalingPathway
<i>TRAV2</i>	T cell receptor alpha variable 2	TCRsignalingPathway
<i>TRAV3</i>	T cell receptor alpha variable 3	TCRsignalingPathway
<i>TRAV4</i>	T cell receptor alpha variable 4	TCRsignalingPathway
<i>TRAV5</i>	T cell receptor alpha variable 5	TCRsignalingPathway
<i>TRAV7</i>	T cell receptor alpha variable 7	TCRsignalingPathway
<i>TRAV8-1</i>	T cell receptor alpha variable 8-1	TCRsignalingPathway
<i>TRAV8-2</i>	T cell receptor alpha variable 8-2	TCRsignalingPathway
<i>TRAV8-3</i>	T cell receptor alpha variable 8-3	TCRsignalingPathway
<i>TRAV8-4</i>	T cell receptor alpha variable 8-4	TCRsignalingPathway
<i>TRAV8-6</i>	T cell receptor alpha variable 8-6	TCRsignalingPathway
<i>TRAV8-7</i>	T cell receptor alpha variable 8-7 (pseudogene)	TCRsignalingPathway
<i>TRAV9-1</i>	T cell receptor alpha variable 9-1	TCRsignalingPathway
<i>TRAV9-2</i>	T cell receptor alpha variable 9-2	TCRsignalingPathway
<i>TRAV10</i>	T cell receptor alpha variable 10	TCRsignalingPathway
<i>TRAV12-1</i>	T cell receptor alpha variable 12-1	TCRsignalingPathway
<i>TRAV12-2</i>	T cell receptor alpha variable 12-2	TCRsignalingPathway
<i>TRAV12-3</i>	T cell receptor alpha variable 12-3	TCRsignalingPathway
<i>TRAV13-1</i>	T cell receptor alpha variable 13-1	TCRsignalingPathway
<i>TRAV13-2</i>	T cell receptor alpha variable 13-2	TCRsignalingPathway
<i>TRAV14DV4</i>	T cell receptor alpha variable 14/delta variable 4	TCRsignalingPathway
<i>TRAV16</i>	T cell receptor alpha variable 16	TCRsignalingPathway
<i>TRAV17</i>	T cell receptor alpha variable 17	TCRsignalingPathway
<i>TRAV18</i>	T cell receptor alpha variable 18	TCRsignalingPathway
<i>TRAV19</i>	T cell receptor alpha variable 19	TCRsignalingPathway
<i>TRAV20</i>	T cell receptor alpha variable 20	TCRsignalingPathway
<i>TRAV21</i>	T cell receptor alpha variable 21	TCRsignalingPathway
<i>TRAV22</i>	T cell receptor alpha variable 22	TCRsignalingPathway
<i>TRAV23DV6</i>	T cell receptor alpha variable 23/delta variable 6	TCRsignalingPathway
<i>TRAV24</i>	T cell receptor alpha variable 24	TCRsignalingPathway
<i>TRAV25</i>	T cell receptor alpha variable 25	TCRsignalingPathway
<i>TRAV26-1</i>	T cell receptor alpha variable 26-1	TCRsignalingPathway
<i>TRAV26-2</i>	T cell receptor alpha variable 26-2	TCRsignalingPathway
<i>TRAV27</i>	T cell receptor alpha variable 27	TCRsignalingPathway
<i>TRAV29DV5</i>	T cell receptor alpha variable 29/delta variable 5	TCRsignalingPathway
<i>TRAV30</i>	T cell receptor alpha variable 30	TCRsignalingPathway
<i>TRAV34</i>	T cell receptor alpha variable 34	TCRsignalingPathway
<i>TRAV35</i>	T cell receptor alpha variable 35	TCRsignalingPathway
<i>TRAV36DV7</i>	T cell receptor alpha variable 36/delta variable 7	TCRsignalingPathway
<i>TRAV38-1</i>	T cell receptor alpha variable 38-1	TCRsignalingPathway
<i>TRAV38-2DV8</i>	T cell receptor alpha variable 38-2/delta variable 8	TCRsignalingPathway
<i>TRAV39</i>	T cell receptor alpha variable 39	TCRsignalingPathway
<i>TRAV40</i>	T cell receptor alpha variable 40	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TRAV41</i>	T cell receptor alpha variable 41	TCRsignalingPathway
<i>TRBC1</i>	T cell receptor beta constant 1	TCRsignalingPathway
<i>TRBC2</i>	T cell receptor beta constant 2	TCRsignalingPathway
<i>TRBD1</i>	T cell receptor beta diversity 1	TCRsignalingPathway
<i>TRBD2</i>	T cell receptor beta diversity 2	TCRsignalingPathway
<i>TRBJ1-1</i>	T cell receptor beta joining 1-1	TCRsignalingPathway
<i>TRBJ1-2</i>	T cell receptor beta joining 1-2	TCRsignalingPathway
<i>TRBJ1-3</i>	T cell receptor beta joining 1-3	TCRsignalingPathway
<i>TRBJ1-4</i>	T cell receptor beta joining 1-4	TCRsignalingPathway
<i>TRBJ1-5</i>	T cell receptor beta joining 1-5	TCRsignalingPathway
<i>TRBJ1-6</i>	T cell receptor beta joining 1-6	TCRsignalingPathway
<i>TRBJ2-1</i>	T cell receptor beta joining 2-1	TCRsignalingPathway
<i>TRBJ2-2</i>	T cell receptor beta joining 2-2	TCRsignalingPathway
<i>TRBJ2-3</i>	T cell receptor beta joining 2-3	TCRsignalingPathway
<i>TRBJ2-4</i>	T cell receptor beta joining 2-4	TCRsignalingPathway
<i>TRBJ2-5</i>	T cell receptor beta joining 2-5	TCRsignalingPathway
<i>TRBJ2-6</i>	T cell receptor beta joining 2-6	TCRsignalingPathway
<i>TRBJ2-7</i>	T cell receptor beta joining 2-7	TCRsignalingPathway
<i>TRBV2</i>	T cell receptor beta variable 2	TCRsignalingPathway
<i>TRBV3-1</i>	T cell receptor beta variable 3-1	TCRsignalingPathway
<i>TRBV4-1</i>	T cell receptor beta variable 4-1	TCRsignalingPathway
<i>TRBV4-2</i>	T cell receptor beta variable 4-2	TCRsignalingPathway
<i>TRBV4-3</i>	T cell receptor beta variable 4-3	TCRsignalingPathway
<i>TRBV5-1</i>	T cell receptor beta variable 5-1	TCRsignalingPathway
<i>TRBV5-4</i>	T cell receptor beta variable 5-4	TCRsignalingPathway
<i>TRBV5-5</i>	T cell receptor beta variable 5-5	TCRsignalingPathway
<i>TRBV5-6</i>	T cell receptor beta variable 5-6	TCRsignalingPathway
<i>TRBV5-7</i>	T cell receptor beta variable 5-7 (non-functional)	TCRsignalingPathway
<i>TRBV5-8</i>	T cell receptor beta variable 5-8	TCRsignalingPathway
<i>TRBV6-1</i>	T cell receptor beta variable 6-1	TCRsignalingPathway
<i>TRBV6-2</i>	T cell receptor beta variable 6-2	TCRsignalingPathway
<i>TRBV6-3</i>	T cell receptor beta variable 6-3	TCRsignalingPathway
<i>TRBV6-4</i>	T cell receptor beta variable 6-4	TCRsignalingPathway
<i>TRBV6-5</i>	T cell receptor beta variable 6-5	TCRsignalingPathway
<i>TRBV6-6</i>	T cell receptor beta variable 6-6	TCRsignalingPathway
<i>TRBV6-7</i>	T cell receptor beta variable 6-7 (non-functional)	TCRsignalingPathway
<i>TRBV6-8</i>	T cell receptor beta variable 6-8	TCRsignalingPathway
<i>TRBV6-9</i>	T cell receptor beta variable 6-9	TCRsignalingPathway
<i>TRBV7-2</i>	T cell receptor beta variable 7-2	TCRsignalingPathway
<i>TRBV7-3</i>	T cell receptor beta variable 7-3	TCRsignalingPathway
<i>TRBV7-4</i>	T cell receptor beta variable 7-4	TCRsignalingPathway
<i>TRBV7-6</i>	T cell receptor beta variable 7-6	TCRsignalingPathway
<i>TRBV7-7</i>	T cell receptor beta variable 7-7	TCRsignalingPathway
<i>TRBV7-8</i>	T cell receptor beta variable 7-8	TCRsignalingPathway
<i>TRBV7-9</i>	T cell receptor beta variable 7-9	TCRsignalingPathway
<i>TRBV9</i>	T cell receptor beta variable 9	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TRBV10-1</i>	T cell receptor beta variable 10-1	TCRsignalingPathway
<i>TRBV10-2</i>	T cell receptor beta variable 10-2	TCRsignalingPathway
<i>TRBV10-3</i>	T cell receptor beta variable 10-3	TCRsignalingPathway
<i>TRBV11-1</i>	T cell receptor beta variable 11-1	TCRsignalingPathway
<i>TRBV11-2</i>	T cell receptor beta variable 11-2	TCRsignalingPathway
<i>TRBV11-3</i>	T cell receptor beta variable 11-3	TCRsignalingPathway
<i>TRBV12-3</i>	T cell receptor beta variable 12-3	TCRsignalingPathway
<i>TRBV12-4</i>	T cell receptor beta variable 12-4	TCRsignalingPathway
<i>TRBV12-5</i>	T cell receptor beta variable 12-5	TCRsignalingPathway
<i>TRBV13</i>	T cell receptor beta variable 13	TCRsignalingPathway
<i>TRBV14</i>	T cell receptor beta variable 14	TCRsignalingPathway
<i>TRBV15</i>	T cell receptor beta variable 15	TCRsignalingPathway
<i>TRBV16</i>	T cell receptor beta variable 16	TCRsignalingPathway
<i>TRBV17</i>	T cell receptor beta variable 17 (non-functional)	TCRsignalingPathway
<i>TRBV18</i>	T cell receptor beta variable 18	TCRsignalingPathway
<i>TRBV19</i>	T cell receptor beta variable 19	TCRsignalingPathway
<i>TRBV20-1</i>	T cell receptor beta variable 20-1	TCRsignalingPathway
<i>TRBV24-1</i>	T cell receptor beta variable 24-1	TCRsignalingPathway
<i>TRBV25-1</i>	T cell receptor beta variable 25-1	TCRsignalingPathway
<i>TRBV27</i>	T cell receptor beta variable 27	TCRsignalingPathway
<i>TRBV28</i>	T cell receptor beta variable 28	TCRsignalingPathway
<i>TRBV29-1</i>	T cell receptor beta variable 29-1	TCRsignalingPathway
<i>TRBV30</i>	T cell receptor beta variable 30	TCRsignalingPathway
<i>TRDC</i>	T cell receptor delta constant	TCRsignalingPathway
<i>TRDD1</i>	T cell receptor delta diversity 1	TCRsignalingPathway
<i>TRDD2</i>	T cell receptor delta diversity 2	TCRsignalingPathway
<i>TRDD3</i>	T cell receptor delta diversity 3	TCRsignalingPathway
<i>TRDJ1</i>	T cell receptor delta joining 1	TCRsignalingPathway
<i>TRDJ2</i>	T cell receptor delta joining 2	TCRsignalingPathway
<i>TRDJ3</i>	T cell receptor delta joining 3	TCRsignalingPathway
<i>TRDJ4</i>	T cell receptor delta joining 4	TCRsignalingPathway
<i>TRDV1</i>	T cell receptor delta variable 1	TCRsignalingPathway
<i>TRDV2</i>	T cell receptor delta variable 2	TCRsignalingPathway
<i>TRDV3</i>	T cell receptor delta variable 3	TCRsignalingPathway
<i>TRGV9</i>	T cell receptor gamma variable 9	TCRsignalingPathway
<i>TRGV8</i>	T cell receptor gamma variable 8	TCRsignalingPathway
<i>TRGV5</i>	T cell receptor gamma variable 5	TCRsignalingPathway
<i>TRGV4</i>	T cell receptor gamma variable 4	TCRsignalingPathway
<i>TRGV3</i>	T cell receptor gamma variable 3	TCRsignalingPathway
<i>TRGV2</i>	T cell receptor gamma variable 2	TCRsignalingPathway
<i>TRGJP2</i>	T cell receptor gamma joining P2	TCRsignalingPathway
<i>TRGJP1</i>	T cell receptor gamma joining P1	TCRsignalingPathway
<i>TRGJP</i>	T cell receptor gamma joining P	TCRsignalingPathway
<i>TRGJ2</i>	T cell receptor gamma joining 2	TCRsignalingPathway
<i>TRGJ1</i>	T cell receptor gamma joining 1	TCRsignalingPathway
<i>TRGC2</i>	T cell receptor gamma constant 2	TCRsignalingPathway

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TRGC1</i>	T cell receptor gamma constant 1	TCRsignalingPathway
<i>TRAV6</i>	T cell receptor alpha variable 6	TCRsignalingPathway
<i>BMP1</i>	bone morphogenetic protein 1	TGFb_Family_Member
<i>BMP10</i>	bone morphogenetic protein 10	TGFb_Family_Member
<i>BMP15</i>	bone morphogenetic protein 15	TGFb_Family_Member
<i>BMP2</i>	bone morphogenetic protein 2	TGFb_Family_Member
<i>BMP3</i>	bone morphogenetic protein 3	TGFb_Family_Member
<i>BMP4</i>	bone morphogenetic protein 4	TGFb_Family_Member
<i>BMP5</i>	bone morphogenetic protein 5	TGFb_Family_Member
<i>BMP6</i>	bone morphogenetic protein 6	TGFb_Family_Member
<i>BMP7</i>	bone morphogenetic protein 7	TGFb_Family_Member
<i>BMP8A</i>	bone morphogenetic protein 8a	TGFb_Family_Member
<i>BMP8B</i>	bone morphogenetic protein 8b	TGFb_Family_Member
<i>GDF1</i>	growth differentiation factor 1	TGFb_Family_Member
<i>GDF10</i>	growth differentiation factor 10	TGFb_Family_Member
<i>GDF11</i>	growth differentiation factor 11	TGFb_Family_Member
<i>GDF15</i>	growth differentiation factor 15	TGFb_Family_Member
<i>GDF2</i>	growth differentiation factor 2	TGFb_Family_Member
<i>GDF3</i>	growth differentiation factor 3	TGFb_Family_Member
<i>GDF5</i>	growth differentiation factor 5	TGFb_Family_Member
<i>GDF6</i>	growth differentiation factor 6	TGFb_Family_Member
<i>GDF7</i>	growth differentiation factor 7	TGFb_Family_Member
<i>GDF9</i>	growth differentiation factor 9	TGFb_Family_Member
<i>GDNF</i>	glial cell derived neurotrophic factor	TGFb_Family_Member
<i>INHHA</i>	inhibin subunit alpha	TGFb_Family_Member
<i>INHBA</i>	inhibin subunit beta A	TGFb_Family_Member
<i>INHBB</i>	inhibin subunit beta B	TGFb_Family_Member
<i>INHBC</i>	inhibin subunit beta C	TGFb_Family_Member
<i>INHBE</i>	inhibin subunit beta E	TGFb_Family_Member
<i>LEFTY1</i>	left-right determination factor 1	TGFb_Family_Member
<i>LEFTY2</i>	left-right determination factor 2	TGFb_Family_Member
<i>NODAL</i>	nodal growth differentiation factor	TGFb_Family_Member
<i>TGFB1</i>	transforming growth factor beta 1	TGFb_Family_Member
<i>TGFB2</i>	transforming growth factor beta 2	TGFb_Family_Member
<i>TGFB3</i>	transforming growth factor beta 3	TGFb_Family_Member
<i>ACVR1B</i>	activin A receptor type 1B	TGFb_Family_Member_Receptor
<i>ACVR1C</i>	activin A receptor type 1C	TGFb_Family_Member_Receptor
<i>ACVR2A</i>	activin A receptor type 2A	TGFb_Family_Member_Receptor
<i>ACVR2B</i>	activin A receptor type 2B	TGFb_Family_Member_Receptor
<i>ACVRL1</i>	activin A receptor like type 1	TGFb_Family_Member_Receptor
<i>AMHR2</i>	anti-Mullerian hormone receptor type 2	TGFb_Family_Member_Receptor
<i>BMPRI1A</i>	bone morphogenetic protein receptor type 1A	TGFb_Family_Member_Receptor
<i>BMPRI1B</i>	bone morphogenetic protein receptor type 1B	TGFb_Family_Member_Receptor
<i>BMPRI2</i>	bone morphogenetic protein receptor type 2	TGFb_Family_Member_Receptor
<i>TGFBRI1</i>	transforming growth factor beta receptor 1	TGFb_Family_Member_Receptor
<i>TGFBRI2</i>	transforming growth factor beta receptor 2	TGFb_Family_Member_Receptor

Supplementary Table SI. Cont.

Gene symbol	Name	Category
<i>TGFB3</i>	transforming growth factor beta receptor 3	TGFB_Family_Member_Receptor
<i>TNFRSF11B</i>	TNF receptor superfamily member 11b	TNF_Family_Members
<i>TNFSF10</i>	TNF superfamily member 10	TNF_Family_Members
<i>TNFSF11</i>	TNF superfamily member 11	TNF_Family_Members
<i>TNFSF12</i>	TNF superfamily member 12	TNF_Family_Members
<i>TNFSF13</i>	TNF superfamily member 13	TNF_Family_Members
<i>TNFSF13B</i>	TNF superfamily member 13b	TNF_Family_Members
<i>TNFSF14</i>	TNF superfamily member 14	TNF_Family_Members
<i>TNFSF15</i>	TNF superfamily member 15	TNF_Family_Members
<i>TNFSF18</i>	TNF superfamily member 18	TNF_Family_Members
<i>TNFSF4</i>	TNF superfamily member 4	TNF_Family_Members
<i>TNFSF8</i>	TNF superfamily member 8	TNF_Family_Members
<i>TNFSF9</i>	TNF superfamily member 9	TNF_Family_Members
<i>TNFRSF10B</i>	TNF receptor superfamily member 10b	TNF_Family_Members_Receptors
<i>TNFRSF10C</i>	TNF receptor superfamily member 10c	TNF_Family_Members_Receptors
<i>TNFRSF10D</i>	TNF receptor superfamily member 10d	TNF_Family_Members_Receptors
<i>TNFRSF11A</i>	TNF receptor superfamily member 11a	TNF_Family_Members_Receptors
<i>TNFRSF12A</i>	TNF receptor superfamily member 12A	TNF_Family_Members_Receptors
<i>TNFRSF13B</i>	TNF receptor superfamily member 13B	TNF_Family_Members_Receptors
<i>TNFRSF13C</i>	TNF receptor superfamily member 13C	TNF_Family_Members_Receptors
<i>TNFRSF14</i>	TNF receptor superfamily member 14	TNF_Family_Members_Receptors
<i>TNFRSF17</i>	TNF receptor superfamily member 17	TNF_Family_Members_Receptors
<i>TNFRSF18</i>	TNF receptor superfamily member 18	TNF_Family_Members_Receptors
<i>TNFRSF19</i>	TNF receptor superfamily member 19	TNF_Family_Members_Receptors
<i>TNFRSF1A</i>	TNF receptor superfamily member 1A	TNF_Family_Members_Receptors
<i>TNFRSF1B</i>	TNF receptor superfamily member 1B	TNF_Family_Members_Receptors
<i>TNFRSF21</i>	TNF receptor superfamily member 21	TNF_Family_Members_Receptors
<i>TNFRSF25</i>	TNF receptor superfamily member 25	TNF_Family_Members_Receptors
<i>TNFRSF4</i>	TNF receptor superfamily member 4	TNF_Family_Members_Receptors
<i>TNFRSF6B</i>	TNF receptor superfamily member 6b	TNF_Family_Members_Receptors
<i>TNFRSF8</i>	TNF receptor superfamily member 8	TNF_Family_Members_Receptors
<i>TNFRSF9</i>	TNF receptor superfamily member 9	TNF_Family_Members_Receptors

Supplementary Table SII. Immunohistochemical assessment grade of AGER (Antibodies: CAB011682)

PatientID	Type	Age	Gender	Intensity
1933	Normal tissue	56	Female	Negative
1859	Normal tissue	61	Male	Negative
2184	Normal tissue	73	Male	Negative
1722	Adenocarcinoma	60	Female	Moderate
1498	Adenocarcinoma	70	Female	Moderate
2067	Adenocarcinoma	72	Female	Moderate
2176	Adenocarcinoma	59	Male	Moderate
1752	Adenocarcinoma	56	Male	Weak
2452	Adenocarcinoma	68	Male	Moderate
1831	Adenocarcinoma	77	Male	Weak
2564	Adenocarcinoma	52	Female	Moderate
1969	Adenocarcinoma	63	Male	Weak
1901	Adenocarcinoma	69	Female	Moderate
3061	Adenocarcinoma	57	Female	Moderate
2540	Adenocarcinoma	61	Male	Moderate

Supplementary Table SIII. Immunohistochemical assessment grade of LAT (Antibody staining: HPA011157)

Patient ID	Type	Age	Gender	Intensity
1933	Normal tissue	56	Female	Weak
1767	Normal tissue	16	Male	Weak
3229	Normal tissue	59	Male	Weak
1722	Adenocarcinoma	60	Female	Negative
1498	Adenocarcinoma	70	Female	Negative
2067	Adenocarcinoma	72	Female	Negative
2176	Adenocarcinoma	59	Male	Negative
1752	Adenocarcinoma	56	Male	Negative
2452	Adenocarcinoma	68	Male	Negative
1831	Adenocarcinoma	77	Male	Negative
2564	Adenocarcinoma	52	Female	Negative
1969	Adenocarcinoma	63	Male	Negative
1901	Adenocarcinoma	69	Female	Negative
3061	Adenocarcinoma	57	Female	Negative
2540	Adenocarcinoma	61	Male	Weak

Supplementary Table SIV. Patient clinical information baseline fact sheet

Characteristic	Levels	Overall
<i>n</i>		24
T stage, <i>n</i> (%)	T1	5 (20.8%)
	T2	8 (33.3%)
	T3	8 (33.3%)
	T4	3 (12.5%)
N stage, <i>n</i> (%)	N0	12 (50%)
	N1	4 (16.7%)
	N2	5 (20.8%)
	N3	1 (4.2%)
	NX	2 (8.3%)
M stage, <i>n</i> (%)	M0	20 (83.3%)
	M1	4 (16.7%)
Clinical stage, <i>n</i> (%)	Stage I	5 (22.7%)
	Stage II	3 (13.6%)
	Stage III	7 (31.8%)
	Stage IV	7 (31.8%)
Age, median (IQR)		71.5 (64, 78)
Weight, median (IQR)		62 (58.25, 75.5)

Supplementary Table SV. Nodes degree of the TF-miRNA-mRNA regulatory network

Name	Type	Node degree
<i>LAT</i>	lowriskIRG	12
<i>AGER</i>	highriskIRG	11
<i>hsa-mir-1236-5p</i>	miRNA	6
<i>hsa-mir-3155a</i>	miRNA	4
<i>E2F1</i>	TF	4
<i>hsa-mir-571</i>	miRNA	3
<i>hsa-mir-559</i>	miRNA	3
<i>hsa-mir-584-5p</i>	miRNA	3
<i>hsa-mir-449b-5p</i>	miRNA	3
<i>TFAP2C</i>	TF	3
<i>hsa-mir-217-5p</i>	miRNA	2
<i>PGLYRP2</i>	highriskIRG	2
<i>hsa-mir-3137</i>	miRNA	2
<i>CHGA</i>	highriskIRG	2
<i>hsa-mir-6738</i>	miRNA	2
<i>hsa-mir-4504</i>	miRNA	2
<i>hsa-mir-3928-5p</i>	miRNA	2
<i>hsa-mir-129-5p</i>	miRNA	2
<i>MYB</i>	TF	2
<i>AVPR1B</i>	lowriskIRG	1
<i>hsa-mir-1253</i>	miRNA	1
<i>hsa-mir-3180-5p</i>	miRNA	1
<i>hsa-mir-5681a</i>	miRNA	1
<i>hsa-mir-3190-5p</i>	miRNA	1
<i>hsa-mir-3198</i>	miRNA	1
<i>hsa-mir-548al</i>	miRNA	1
<i>hsa-mir-548i</i>	miRNA	1
<i>IL20RB</i>	highriskIRG	1
<i>hsa-mir-5189</i>	miRNA	1
<i>hsa-mir-3195</i>	miRNA	1
<i>TCF21</i>	TF	1
<i>GATA3</i>	TF	1
<i>GATA4</i>	TF	1
<i>TFAP2A</i>	TF	1
<i>FOXM1</i>	TF	1

Supplementary Table SVI. Correlation miRNA prediction of target genes

MiRNA	Immune gene	Correlation coefficient	P-value
<i>hsa-mir-5681a</i>	LAT	0.402651445	1.46E-20
<i>hsa-mir-571</i>	AGER	0.427261905	3.30E-23
<i>hsa-mir-548i</i>	IL20RB	0.42874432	2.25E-23
<i>hsa-mir-3180-5p</i>	AGER	0.437248026	2.41E-24
<i>hsa-mir-217-5p</i>	AGER	0.443277741	4.75E-25
<i>hsa-mir-3137</i>	LAT	0.44751388	1.49E-25
<i>hsa-mir-548al</i>	CHGA	0.44907275	9.67E-26
<i>hsa-mir-129-5p</i>	LAT	0.455895481	1.43E-26
<i>hsa-mir-3198</i>	AGER	0.467934493	4.39E-28
<i>hsa-mir-3155a</i>	AVPR1B	0.471848523	1.37E-28
<i>hsa-mir-1253</i>	LAT	0.483860446	3.52E-30
<i>hsa-mir-4504</i>	LAT	0.49650395	6.35E-32
<i>hsa-mir-5189</i>	LAT	0.496864307	5.65E-32
<i>hsa-mir-129-5p</i>	AGER	0.50783698	1.50E-33
<i>hsa-mir-6738</i>	LAT	0.520628852	1.85E-35
<i>hsa-mir-3928-5p</i>	AGER	0.527300378	1.73E-36
<i>hsa-mir-3928-5p</i>	LAT	0.54100275	1.13E-38
<i>hsa-mir-6738</i>	AGER	0.545579936	1.99E-39
<i>hsa-mir-3137</i>	AGER	0.568722976	2.04E-43
<i>hsa-mir-559</i>	LAT	0.572763162	3.80E-44
<i>hsa-mir-449b-5p</i>	AGER	0.57333941	2.99E-44
<i>hsa-mir-217-5p</i>	LAT	0.576037982	9.58E-45
<i>hsa-mir-559</i>	AGER	0.631024159	6.81E-56
<i>hsa-mir-1236-5p</i>	CHGA	0.649146882	4.43E-60
<i>hsa-mir-584-5p</i>	AGER	0.657304223	4.65E-62
<i>hsa-mir-449b-5p</i>	LAT	0.65784814	3.41E-62
<i>hsa-mir-3190-5p</i>	PGLYRP2	0.67021065	2.55E-65
<i>hsa-mir-584-5p</i>	LAT	0.700384518	1.26E-73
<i>hsa-mir-3195</i>	PGLYRP2	0.736702945	3.99E-85

Supplementary Table SVII. AGER and LAT expression assays by qPCR ($2^{-\Delta\Delta CT}$)

Group	Sample	AGER	LAT
Normal	sample1	2.893284783	3.572353875
Normal	sample2	0.058222005	0.121318797
Normal	sample3	9.936297251	4.846270726
Normal	sample4	1.732323457	0.518305641
Normal	sample5	0.585486712	0.547858413
Normal	sample6	0.14841495	0.413762557
Normal	sample7	0.309435009	3.208446663
Normal	sample8	1.05534034	0.68154225
Normal	sample9	2.699530157	1.80484507
Normal	sample10	6.5782705	1.330413765
Normal	sample11	3.952343488	1.091925933
Normal	sample12	1.732323457	1.981887402
Normal	sample13	0.23288802	0.211228294
Normal	sample14	1.216476401	2.754661409
Normal	sample15	0.39302918	1.512436949
Normal	sample16	12.70838091	4.189781476
Normal	sample17	7.987302389	1.901153473
Normal	sample18	0.084653195	0.127792493
Normal	sample19	0.026880585	0.081722378
Normal	sample20	0.24446644	0.309256323
Normal	sample21	0.48893288	1.249953998
Normal	sample22	0.35299223	0.440396528
Normal	sample23	6.180434785	3.789151963
Normal	sample24	14.90483329	7.552084987
Tumor	sample1	13.156541	0.162879281
Tumor	sample2	14.44710313	0.219436436
Tumor	sample3	8.155132591	0.177621115
Tumor	sample4	35.94472929	0.470372297
Tumor	sample5	33.65405248	0.275834535
Tumor	sample6	33.5376183	1.224230316
Tumor	sample7	24.29703446	0.833281006
Tumor	sample8	10.76076197	1.496793294
Tumor	sample9	18.22324951	1.298526089
Tumor	sample10	4.587500558	1.062067161
Tumor	sample11	10.64945971	1.249953998
Tumor	sample12	10.57589852	1.228480536
Tumor	sample13	1.85665831	0.068958634
Tumor	sample14	50.83352366	0.137917267
Tumor	sample15	14.29767177	0.720402454
Tumor	sample16	64.56625002	2.222024925
Tumor	sample17	19.59900262	0.089428284
Tumor	sample18	16.42371205	0.157877228
Tumor	sample19	4.899750655	0.23929713
Tumor	sample20	79.490378	0.796571076
Tumor	sample21	41.28965141	0.146795027
Tumor	sample22	13.29404588	0.063454883
Tumor	sample23	44.25315266	1.416052741
Tumor	sample24	25.68240376	0.189054619