Appendices

Appendix 1 - Supplementary Materials and Methods:
(Adapted from Vento-Tormo R, Efremova M, et al., under submission)

Decidual, placental, and peripheral blood samples
All tissue samples used in this study were obtained with written informed consent from participants in accordance with the guidelines in The Declaration of Helsinki. Human placental and decidual samples were obtained from the MRC/Wellcome-Trust-funded Human Developmental Biology Resource (HDBR[112], http://www.hdbr.org) with appropriate maternal written consent and approval from the Newcastle and North Tyneside NHS Health Authority Joint Ethics Committee (08/H0906/21+5). Peripheral blood from women undergoing elective terminations were obtained with maternal written consent and with approvals from the Newcastle Academic Health Partners (reference NAHPB-093) and HRA NHS Research Ethics committee North-East-Newcastle North Tyneside 1 (Rec reference 12/NE/0395).

Calculation of fetal development
Embryos of up to 8 post-conceptional weeks (PCW) were staged using the Carnegie staging method[113]. After 8 PCW, fetal age was estimated from measurements of foot length and heel to knee length. These were compared with a standard growth chart[114].

Single-cell isolation from decidua, placenta, and peripheral blood
Decidual and placental tissue were washed in HAMS F12 medium, macroscopically separated, and washed for at least 10 mins in RPMI or HAMS F12 medium, respectively, before processing. Decidual tissues were chopped using scalpels into approximately 0.2 mm^3 cubes and enzymatically digested in 15ml 0.4mg/mL collagenase V solution in RPMI 1640 medium/10% FCS at 37°C for 45 min. The supernatant was diluted with medium and passed through 100um cell sieve and then 40um cell sieve. The flow-through was centrifuged and resuspended in 5ml of red blood cell lysis buffer for 10min.

First trimester placenta were placed in petri dishes and placental villi were scraped from the chorionic membrane. The stripped membrane was discarded and the villous tissue was enzymatically digested in 70 ml 0.2% trypsin 250/0.02% EDTA in PBS with stirring at 37°C for 9 min. The disaggregated cell suspension was passed through sterile muslin gauze and washed with HAMS F12 medium containing 20% FBS. Cells were pelleted from the filtrate by centrifugation and re-suspended in HAMS F12. The undigested, gelatinous tissue remnant was retrieved from the gauze and further digested with 10-15 ml collagenase V at 1.0mg/ml in HAMS F12 medium/10% FBS with gentle shaking at 37°C for 10 min. The disaggregated cell suspension from collagenase digestion was passed through sterile muslin gauze and the cells pelleted from the filtrate as before. Cells obtained from both enzyme digests were pooled together and passed through 100um cell sieve and washed in HAMS F12. The flow-through was centrifuged and resuspended in 5ml of red blood cell lysis buffer for 10min.

Blood samples were layered onto a Ficoll-Paque gradient and centrifuged at 2,000 rpm for 30 min. Peripheral blood mononuclear cells from the interface between the plasma and the Ficoll-Paque gradient, were collected and washed in ice-cold PBS, followed by centrifugation at 2,000 rpm for 5 min. The pellet was resuspended in 5ml of red blood cell lysis buffer for 10min.

Flow cytometry, plate-based SmartSeq2 scRNA-seq, and droplet-based scRNA-seq
Decidual and blood cells were incubated at 4°C with 2.5ul of antibodies in 1% FBS in DPBS without Calcium and Magnesium. DAPI was used for live/dead discrimination. We used an antibody panel (Appendix 3) designed to enrich for certain populations for single-cell sorting and scRNA-seq. Cells were sorted using a Becton Dickinson (BD) FACS Aria Fusion with 5 excitation lasers (355nm, 405nm, 488nm, 561nm and 635nm Red), and 18 fluorescent detectors plus forward and side scatter. The sorter was controlled using BD FACS DIVA software (v7).

For scRNA-seq using the plate-based SmartSeq2 protocol, we created overlapping gates to comprehensively and evenly sample all immune cell populations in the decidua (gating strategy in Appendix 4). B cells (CD19$^+$/CD20$^+$) were excluded from analysis due to their absence in decidua[115]. Single cells were sorted into 96-well full-skirted Eppendorf plates chilled to 4°C, prepared with lysis buffer consisting of 10 ul of TCL buffer supplemented with 1% b-mercaptoethanol. Single-cell lysates were sealed, vortexed, spun down at 300g at 4°C for 1 min, immediately placed on dry ice, and transferred for storage at -80°C. The SmartSeq2 protocol was performed on single cells as described

previously[116,117], with some modifications[118]. Libraries were sequenced aiming at an average depth of 1 million reads/cell, on an Illumina HiSeq 2000 with v4 chemistry (paired-end 75-bp reads).

For droplet-based scRNA-seq, blood and decidual cells were sorted into immune (CD45$^+$) and non-immune (CD45$^-$) fractions. Only viable cells were considered, and B cells (CD19$^+$/CD20$^+$) were excluded. Placental cells were stained for DAPI and only viable cells were sorted. Cells were sorted into an Eppendorf tube containing PBS with 0.04% BSA. Cells were immediately counted using a Neubauer hemocytometer and loaded in the 10x Genomics Chromium. 10x Genomics v2 libraries were prepared per manufacturer's instructions. Libraries were sequenced (paired-end) aiming at a minimum coverage 50,000 raw reads per cell on an Illumina HiSeq 4000.

Bulk DNA/RNA extraction, whole genome sequencing, bulk RNA-sequencing
Tissue DNA and RNA were extracted from fresh frozen samples using the AllPrep DNA/RNA/miRNA kit following manufacturer's instructions. Libraries for whole-genome sequencing were constructed according to Illumina library protocols, and 100-bp paired-end sequencing was performed on Illumina HiSeq X genome analyzers to an average of 30× coverage. Libraries for bulk RNA-sequencing were constructed according to Illumina library protocols, and 100-bp paired-end sequencing was performed on Illumina HiSeq 2500 v4.

CyTOF staining and acquisition
Cells were resuspended to 10 million/ml and stained for 5min at room temperature (RT) with 5uM Cell-ID Cisplatin for live/dead discrimination. Cells were then stained for surface markers in two stages. First, cells were incubated with fluorescent-labeled antibodies for 30min at RT. Following washes, cells were then incubated with metal-tagged antibodies for 1 hour at RT (antibodies used are listed in Appendix 3). Cells were then fixed with 1.6% formaldehyde for 1 hour at RT. Cells were permeabilized with 0.1% Triton X-100 for 5 minutes at RT. Intracellular staining was then performed with metal-tagged antibodies at 4°C for 12 hours. Finally, cells were incubated with 125nM Cell-ID Intercalator-Iridium for 1 hour at RT.

Stained samples were washed in MilliQ water, counted, and adjusted to an optimal cell density of 0.5 million/ml before being spiked with EQ calibration beads for signal normalization. Samples were then run on a fully calibrated 3rd generation Fluidigm Helios CyTOF system. EQ bead data normalization was performed using the Helios acquisition software and FCS files were created with a half Gaussian normalization (negatives only) for analysis in FlowJo (FlowJo 5.4+).

Appendix 2 - Canonical marker genes used to annotate decidual and placental cell populations:

(Adapted from Vento-Tormo R, Efremova M, et al., under submission)

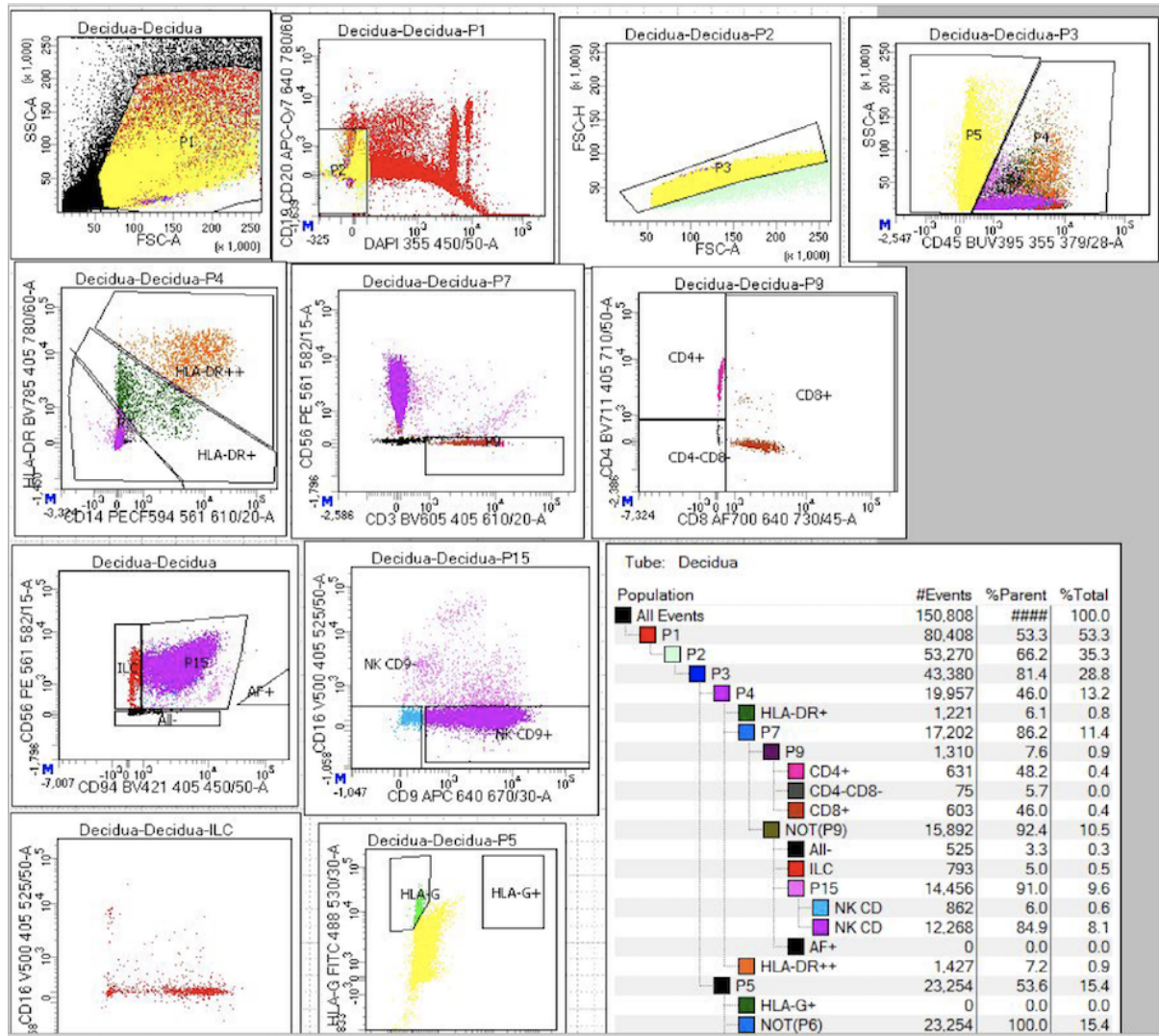| Gene	Cell Type
CD3G	T cells
CD14	Myeloid cells
PTPRC (CD45)	Immune cells
PECAM1	Endothelial cells
CLEC9A	DC1
CD1C	DC2
LYVE1	Hofbauer cells, Endothelial lymphatic cells
MKI67	Cycling
NCAM1 (CD56)	NK cells
CD11C	Myeloid cells
DKK1	Decidual stromal cells
COL4A2	Fibroblasts
RGS5	Pericytes
REN	Pericytes
PAGE4	Villous cytotrophoblasts (+++)
HLA-G	Extravillous trophoblasts
ERVFRD-1	Syncytiotrophoblast
PDGFRB	Fibroblasts, smooth muscle cells/pericytes
DLK1	Fibroblasts (fetal)
HAPLN	Fibroblasts (fetal)
PITX2	Fibroblasts (fetal)
EPCAM	Epithelial cells
CD34	Endothelial cells

Appendix 3 - Antibody panels used for FACS index sorting and CyTOF:

(Adapted from Vento-Tormo R, Efremova M, et al., under submission)

Antibody	Clone	Company	Assay	Isotope (CyTOF)	Element (CyTOF)
CD45-BUV395	Clone HI30 (RUO)	BD Bioscience	FACS		
CD94-BV421	HP-3D9 (RUO)	BD Bioscience	FACS		
CD16-BV500	3GH	BD Bioscience	FACS		
CD3-BV605	SK7	Biolegend	FACS		
CD4-BV711	RPA-T4	Biolegend	FACS		
HLA-DR BV786	L243	Biolegend	FACS		
HLA-G FITC	MEM-G/9	BioRad	FACS		
CD56-PE	REA196	Miltenyi	FACS		
CD14-PECF594	PE-CF594	BD Bioscience	FACS		
CD9-APC	M-L13	BD Bioscience	FACS		
CD8-AF700	HIT8a	Biolegend	FACS		
CD19-APCCy7	HIB19	BIoLegend	FACS		
CD20-APCCy7	2H7	BIoLegend	FACS		
CD45	HI30	Fluidigm	CyTOF (1:400)	89	Y
CD56	HCD56	Biolegend	CyTOF (1:25)	113	In
CD49d	9F10	Fluidigm	CyTOF (1:800)	141	Pr
CD19	HIB19	Fluidigm	CyTOF (1:200)	142	Nd
TCRgd	B1	Biolegend	CyTOF (1:25)	143	Nd
CD3	UCHT	Biolegend	CyTOF (1:400)	144	Nd
CD4	RPA-T4	Fluidigm	CyTOF (1:200)	145	Nd
IgD	IA6-2	Fluidigm	CyTOF (1:200)	146	Nd
CD7	CD7-6B7	Fluidigm	CyTOF (1:800)	147	Sm
CD294	BM16	Biolegend	CyTOF (1:25)	148	Nd
CD34	581	Fluidigm	CyTOF (1:400)	149	Sm
KIR2DL1-PE	REA284	Miltenyi	CyTOF (1:10)	150	Nd
anti-PE	PE001	Biolegend	CYTOF (1:150)		
CD123	6H6	Fluidigm	CyTOF (1:400)	151	Eu
FcERI	SA6.E9	Biolegend	CyTOF (1:400)	152	Sm
CD303	201A	Fluidigm	CyTOF (1:100)	153	Eu
GranzymeB	REA226	Miltenyi	CyTOF (1:200)	154	Sm
CD27	L128	Fluidigm	CyTOF (1:800)	155	Gd
SIGLEC6-FITC	REA-852	Miltenyi	CyTOF (1:50)		
anti-FITC	FIT-22	Biolegend	CyTOF (1:400)	156	Gd
AXL	MM0098-2N33	Abcam	CyTOF (1:25)	157	Gd
KIR2DL3-APC	REA147	Miltenyi	CyTOF (1:20)		
anti-APC	APC0003	Biolegend	CyTOF (1:800)	158	Gd
CD11c	Bu15	Fluidigm	CyTOF (1:400)	159	Tb
CD103	Ber-ACT8	Biolegend	CyTOF (1:100)	160	Gd
CD66	B1.1	BD	CyTOF (1:100)	161	Dy
Foxp3 intra	PCH101	Fluidigm	CyTOF (1:200)	162	Dy
CD20	2H7	Biolegend	CyTOF (1:400)	163	Dy
CD161	HP-3G10	Fluidigm	CyTOF (1:200)	164	Dy
CD127	A019D5	Fluidigm	CyTOF (1:200)	165	Ho
CLEC9A (CD370)	AER-37/8F9	Biolegend	CyTOF (1:25)	166	Er
CD45RO	UCHL1	Biolegend	CyTOF (1:100)	167	Er
CD8	SK1	Fluidigm	CyTOF (1:800)	168	Er
CD25	2A3	Fluidigm	CyTOF (1:200)	169	Tm
CD45RA	HI100	Fluidigm	CyTOF (1:800)	170	Er
CD1c	L161	Biolegend	CyTOF (1:400)	171	Yb
CD14	M5E2	Biolegend	CyTOF (1:200)	172	Yb
CD117 (C-kit)	104D2	Biolegend	CyTOF (1:25)	173	Yb
HLADR	L243	Biolegend	CyTOF (1:200)	174	Yb
BCL6	K112-91	BD	CyTOF (1:200)	175	Lu
S100A9	CF-557	Thermofisher	CyTOF (1:50)	176	Yb
CD16	3G8	Fluidigm	CyTOF (1:400)	209	Bi

Appendix 4 - Gating strategy for FACS index sorting data:

(From Vento-Tormo R, Efremova M, et al., under submission)

Appendix 5 - Genes determined to be enriched in placenta and endometrium (Tau ≥ 0.8) based on tissue-level expression data from the Human Protein Atlas:

Ensembl gene ID	Gene symbol	Highest-expressing tissue	Tissue gene expression (tpm)	Tau
ENSG00000002726	AOC1	placenta	711.7	0.9632
ENSG00000003436	TFPI	placenta	340.4	0.8741
ENSG00000006659	LGALS14	placenta	69	0.9959
ENSG00000006747	SCIN	placenta	116.3	0.9327
ENSG00000006788	MYH13	placenta	0.7	0.9246
ENSG00000019991	HGF	placenta	435.4	0.9829
ENSG00000029993	HMGB3	placenta	195.7	0.8588
ENSG00000038295	TLL1	placenta	10.4	0.8790
ENSG00000042304	C2orf83	placenta	2.9	0.9406
ENSG00000043591	ADRB1	placenta	45.2	0.9656
ENSG00000049192	ADAMTS6	placenta	2.7	0.8436
ENSG00000050344	NFE2L3	placenta	51.1	0.9046
ENSG00000050555	LAMC3	placenta	88.2	0.9558
ENSG00000054277	OPN3	placenta	26.8	0.8471
ENSG00000060718	COL11A1	placenta	27.9	0.9810
ENSG00000061455	PRDM6	placenta	5.9	0.8644
ENSG00000062524	LTK	placenta	15.1	0.8168
ENSG00000066056	TIE1	placenta	70.1	0.8539
ENSG00000066827	ZFAT	placenta	44	0.9422
ENSG00000070404	FSTL3	placenta	259.7	0.9233
ENSG00000070748	CHAT	placenta	7.1	0.9910
ENSG00000072694	FCGR2B	placenta	571.2	0.9808
ENSG00000076770	MBNL3	placenta	240.2	0.9470
ENSG00000080573	COL5A3	placenta	47.4	0.8538
ENSG00000081985	IL12RB2	placenta	11.7	0.9088
ENSG00000083782	EPYC	placenta	8.8	0.9886
ENSG00000085382	HACE1	placenta	43.6	0.8970
ENSG00000086696	HSD17B2	placenta	548	0.9420
ENSG00000087303	NID2	placenta	87.4	0.8800
ENSG00000091136	LAMB1	placenta	261.4	0.8247
ENSG00000100234	TIMP3	placenta	1428.9	0.8517
ENSG00000100311	PDGFB	placenta	59.5	0.8444
ENSG00000100593	ISM2	placenta	272.7	0.9989
ENSG00000100979	PLTP	placenta	630.8	0.8465
ENSG00000101197	BIRC7	placenta	9.1	0.9686
ENSG00000101846	STS	placenta	36.3	0.8318
ENSG00000101951	PAGE4	placenta	2026.4	0.9726
ENSG00000102195	GPR50	placenta	0.6	0.9676
ENSG00000102243	VGLL1	placenta	255.8	0.9948
ENSG00000102755	FLT1	placenta	617.5	0.9730
ENSG00000103310	ZP2	placenta	0.7	0.9008
ENSG00000104827	CGB	placenta	14.9	0.9953
ENSG00000105173	CCNE1	placenta	44.3	0.9169
ENSG00000105198	LGALS13	placenta	16.5	0.9988
ENSG00000105246	EBI3	placenta	208.2	0.9805
ENSG00000105492	SIGLEC6	placenta	147.1	0.9899
ENSG00000105825	TFPI2	placenta	1205.5	0.9902
ENSG00000105989	WNT2	placenta	92.5	0.9802
ENSG00000106302	HYAL4	placenta	5.9	0.8983
ENSG00000106366	SERPINE1	placenta	595.2	0.9053
ENSG00000106484	MEST	placenta	1079.4	0.9755
ENSG00000106511	MEOX2	placenta	57.2	0.9263
ENSG00000107984	DKK1	placenta	71.5	0.9508
ENSG00000108786	HSD17B1	placenta	98.3	0.9695
ENSG00000108813	DLX4	placenta	5.3	0.9686
ENSG00000109321	AREG	placenta	461	0.9623
ENSG00000110079	MS4A4A	placenta	101.4	0.8356
ENSG00000111452	ADGRD1	placenta	44.3	0.8316
ENSG00000111879	FAM184A	placenta	45.6	0.8603
ENSG00000112175	BMP5	placenta	101.7	0.9705
ENSG00000112297	AIM1	placenta	106.9	0.8354
ENSG00000112394	SLC16A10	placenta	38.2	0.8793
ENSG00000112414	ADGRG6	placenta	66.6	0.8851
ENSG00000112419	PHACTR2	placenta	119.1	0.9064
ENSG00000113140	SPARC	placenta	3224.6	0.8240
ENSG00000113494	PRLR	placenta	70.3	0.8927
ENSG00000113555	PCDH12	placenta	38.5	0.8918
ENSG00000115380	EFEMP1	placenta	485.9	0.8078

ENSG00000115414	FN1	placenta	4245.7	0.9544
ENSG00000115596	WNT6	placenta	2.9	0.9157
ENSG00000115602	IL1RL1	placenta	286.6	0.9852
ENSG00000116016	EPAS1	placenta	636.7	0.8559
ENSG00000116017	ARID3A	placenta	33.3	0.9253
ENSG00000116183	PAPPA2	placenta	82.1	0.9896
ENSG00000116194	ANGPTL1	placenta	188.3	0.8594
ENSG00000116962	NID1	placenta	323.7	0.8909
ENSG00000117385	P3H1	placenta	53.1	0.8419
ENSG00000117394	SLC2A1	placenta	133.9	0.9694
ENSG00000118495	PLAGL1	placenta	362.2	0.9421
ENSG00000118526	TCF21	placenta	62.1	0.8822
ENSG00000118785	SPP1	placenta	4016.3	0.9446
ENSG00000119630	PGF	placenta	70.9	0.8893
ENSG00000119699	TGFB3	placenta	84.3	0.8008
ENSG00000120149	MSX2	placenta	47.5	0.9438
ENSG00000120156	TEK	placenta	65.3	0.8486
ENSG00000120211	INSL4	placenta	22.2	0.9950
ENSG00000120708	TGFBI	placenta	606	0.8663
ENSG00000123243	ITIH5	placenta	122.7	0.8172
ENSG00000124019	FAM124B	placenta	12.4	0.8663
ENSG00000124208	TMEM189-UBE2V1	placenta	5.5	0.8202
ENSG00000124260	MAGEA10	placenta	13.5	0.9796
ENSG00000124440	HIF3A	placenta	39.5	0.8790
ENSG00000124467	PSG8	placenta	9.1	0.9976
ENSG00000124491	F13A1	placenta	664.9	0.9382
ENSG00000124615	MOCS1	placenta	59.8	0.8017
ENSG00000124749	COL21A1	placenta	38.7	0.8796
ENSG00000125810	CD93	placenta	195.4	0.8789
ENSG00000126709	IFI6	placenta	412.1	0.8828
ENSG00000127920	GNG11	placenta	122.3	0.8626
ENSG00000127928	GNGT1	placenta	3.9	0.9815
ENSG00000128052	KDR	placenta	118.2	0.8682
ENSG00000128917	DLL4	placenta	28.4	0.8417
ENSG00000129467	ADCY4	placenta	20.9	0.8405
ENSG00000129757	CDKN1C	placenta	202	0.9423
ENSG00000129965	INS-IGF2	placenta	4.6	0.9771
ENSG00000130513	GDF15	placenta	121.8	0.9094
ENSG00000130829	DUSP9	placenta	102.9	0.9902
ENSG00000131055	COX4I2	placenta	156.1	0.9621
ENSG00000131097	HIGD1B	placenta	152.3	0.9533
ENSG00000131203	IDO1	placenta	148	0.9380
ENSG00000131386	GALNT15	placenta	42.6	0.8620
ENSG00000132000	PODNL1	placenta	12.3	0.8579
ENSG00000132297	HHLA1	placenta	0.1	1.0000
ENSG00000133131	MORC4	placenta	113.4	0.8620
ENSG00000133800	LYVE1	placenta	211.4	0.8792
ENSG00000134323	MYCN	placenta	9.6	0.8909
ENSG00000134640	MTNR1B	placenta	1.4	0.9663
ENSG00000134871	COL4A2	placenta	827.3	0.9113
ENSG00000135047	CTSL	placenta	744	0.8647
ENSG00000135048	TMEM2	placenta	93.9	0.8310
ENSG00000135312	HTR1B	placenta	13.7	0.9550
ENSG00000135346	CGA	placenta	652.2	0.9976
ENSG00000135838	NPL	placenta	63.2	0.8089
ENSG00000135862	LAMC1	placenta	330.2	0.8758
ENSG00000135919	SERPINE2	placenta	1612.5	0.9719
ENSG00000136160	EDNRB	placenta	178.8	0.8797
ENSG00000136231	IGF2BP3	placenta	40.3	0.9795
ENSG00000136487	GH2	placenta	189	0.9997
ENSG00000136488	CSH1	placenta	13476	0.9997
ENSG00000136960	ENPP2	placenta	372.6	0.8499
ENSG00000137270	GCM1	placenta	29	0.9919
ENSG00000137507	LRRC32	placenta	75.9	0.8107
ENSG00000137672	TRPC6	placenta	29.8	0.8895
ENSG00000137869	CYP19A1	placenta	173.9	0.9928
ENSG00000137872	SEMA6D	placenta	64.3	0.8528
ENSG00000138031	ADCY3	placenta	121.3	0.8018
ENSG00000138316	ADAMTS14	placenta	11	0.8778
ENSG00000138829	FBN2	placenta	117.6	0.9893
ENSG00000139292	LGR5	placenta	26.7	0.9043
ENSG00000139567	ACVRL1	placenta	125.5	0.8551
ENSG00000140105	WARS	placenta	468.8	0.8174
ENSG00000140873	ADAMTS18	placenta	28.9	0.9888
ENSG00000142910	TINAGL1	placenta	267.7	0.9028

ENSG00000143226	FCGR2A	placenta	159.2	0.8337
ENSG00000143382	ADAMTSL4	placenta	89.1	0.9051
ENSG00000144476	ACKR3	placenta	175.2	0.8478
ENSG00000144648	ACKR2	placenta	22.8	0.9271
ENSG00000144891	AGTR1	placenta	212	0.9579
ENSG00000145604	SKP2	placenta	83.9	0.9012
ENSG00000145681	HAPLN1	placenta	102.5	0.9817
ENSG00000145715	RASA1	placenta	136.1	0.8372
ENSG00000145911	N4BP3	placenta	11.8	0.8505
ENSG00000146648	EGFR	placenta	97.3	0.8412
ENSG00000146674	IGFBP3	placenta	2649.6	0.9528
ENSG00000147113	CXorf36	placenta	58	0.8470
ENSG00000147257	GPC3	placenta	838.1	0.9762
ENSG00000147571	CRH	placenta	8	0.9844
ENSG00000147655	RSPO2	placenta	25.6	0.8850
ENSG00000148848	ADAM12	placenta	236.1	0.9839
ENSG00000148926	ADM	placenta	157.8	0.8566
ENSG00000149257	SERPINH1	placenta	327	0.8225
ENSG00000149564	ESAM	placenta	156.5	0.8627
ENSG00000149972	CNTN5	placenta	3.4	0.9199
ENSG00000150048	CLEC1A	placenta	70.5	0.9383
ENSG00000150636	CCDC102B	placenta	40.6	0.8855
ENSG00000150938	CRIM1	placenta	238.1	0.8478
ENSG00000152207	CYSLTR2	placenta	36.4	0.9139
ENSG00000152402	GUCY1A2	placenta	25.4	0.8491
ENSG00000153071	DAB2	placenta	319.5	0.8618
ENSG00000153162	BMP6	placenta	33.1	0.8839
ENSG00000154342	WNT3A	placenta	23	0.9903
ENSG00000154721	JAM2	placenta	92.1	0.8687
ENSG00000154736	ADAMTS5	placenta	42	0.8921
ENSG00000154914	USP43	placenta	11.6	0.8190
ENSG00000154930	ACSS1	placenta	165.1	0.8504
ENSG00000155622	XAGE2	placenta	292.4	0.9990
ENSG00000155966	AFF2	placenta	20.9	0.9099
ENSG00000156009	MAGEA8	placenta	18.8	0.9967
ENSG00000156466	GDF6	placenta	15	0.9672
ENSG00000158270	COLEC12	placenta	28.2	0.8726
ENSG00000162493	PDPN	placenta	192.4	0.8948
ENSG00000162624	LHX8	placenta	1.8	0.9012
ENSG00000163106	HPGDS	placenta	28	0.8862
ENSG00000163283	ALPP	placenta	45.5	0.9808
ENSG00000163638	ADAMTS9	placenta	45	0.8494
ENSG00000164093	PITX2	placenta	71.9	0.9730
ENSG00000164318	EGFLAM	placenta	72.7	0.8583
ENSG00000164451	FAM26D	placenta	33.6	0.9985
ENSG00000164488	DACT2	placenta	18.7	0.9376
ENSG00000164619	BMPER	placenta	9.4	0.8159
ENSG00000164707	SLC13A4	placenta	76.2	0.9954
ENSG00000165124	SVEP1	placenta	86.6	0.9348
ENSG00000165457	FOLR2	placenta	233.7	0.8473
ENSG00000165905	GYLTL1B	placenta	52.5	0.9171
ENSG00000166086	JAM3	placenta	143.3	0.8281
ENSG00000166147	FBN1	placenta	106.6	0.8566
ENSG00000166510	CCDC68	placenta	45.8	0.8492
ENSG00000166863	TAC3	placenta	610.5	0.9973
ENSG00000167244	IGF2	placenta	3974.6	0.9896
ENSG00000167612	ANKRD33	placenta	0.5	1.0000
ENSG00000167703	SLC43A2	placenta	31.6	0.8612
ENSG00000168065	SLC22A11	placenta	44.5	0.9770
ENSG00000168140	VASN	placenta	16	0.8120
ENSG00000168487	BMP1	placenta	21	0.8536
ENSG00000168621	GDNF	placenta	6.9	0.8072
ENSG00000168875	SOX14	placenta	2.4	0.9861
ENSG00000168952	STXBP6	placenta	60.7	0.8135
ENSG00000169495	HTRA4	placenta	94.4	0.9875
ENSG00000169635	HIC2	placenta	8.4	0.8237
ENSG00000169860	P2RY1	placenta	33.7	0.8745
ENSG00000170498	KISS1	placenta	328	0.9985
ENSG00000170542	SERPINB9	placenta	74.3	0.8426
ENSG00000170545	SMAGP	placenta	144.1	0.8824
ENSG00000170848	PSG6	placenta	70.1	0.9993
ENSG00000170891	CYTL1	placenta	64.3	0.9311
ENSG00000170965	PLAC1	placenta	37.6	0.9978
ENSG00000171056	SOX7	placenta	49.2	0.8984
ENSG00000171388	APLN	placenta	79.3	0.9677

ENSG00000171402	XAGE3	placenta	571.7	0.9996
ENSG00000172179	PRL	placenta	27.1	0.9829
ENSG00000172889	EGFL7	placenta	262.5	0.9043
ENSG00000172901	LVRN	placenta	31.2	0.9842
ENSG00000173110	HSPA6	placenta	27.7	0.8734
ENSG00000173157	ADAMTS20	placenta	0.8	0.9688
ENSG00000173391	OLR1	placenta	159.6	0.9432
ENSG00000174059	CD34	placenta	313.8	0.8602
ENSG00000174792	C4orf26	placenta	5.8	0.9808
ENSG00000174944	P2RY14	placenta	45.4	0.8653
ENSG00000175318	GRAMD2	placenta	69.4	0.9401
ENSG00000177058	SLC38A9	placenta	79.8	0.8768
ENSG00000178033	FAM26E	placenta	6.4	0.8077
ENSG00000178860	MSC	placenta	22.6	0.8010
ENSG00000179046	TRIML2	placenta	5.9	0.9831
ENSG00000179097	HTR1F	placenta	2.7	0.8940
ENSG00000179111	HES7	placenta	1.1	0.8662
ENSG00000179304	FAM156B	placenta	46.3	0.8635
ENSG00000179776	CDH5	placenta	332.2	0.9364
ENSG00000180190	TDRP	placenta	46.5	0.8133
ENSG00000180475	OR10Q1	placenta	0.1	1.0000
ENSG00000180785	OR51E1	placenta	9.5	0.9044
ENSG00000181649	PHLDA2	placenta	54.3	0.9756
ENSG00000181652	ATG9B	placenta	2	0.9375
ENSG00000182118	FAM89A	placenta	97.9	0.9112
ENSG00000182752	PAPPA	placenta	103.9	0.9785
ENSG00000182963	GJC1	placenta	50.9	0.8553
ENSG00000183632	TP53TG3	placenta	0.4	0.9583
ENSG00000183668	PSG9	placenta	146.9	0.9993
ENSG00000183671	GPR1	placenta	11.2	0.8814
ENSG00000183691	NOG	placenta	15.8	0.9655
ENSG00000183734	ASCL2	placenta	6.4	0.8255
ENSG00000183807	FAM162B	placenta	93.2	0.9411
ENSG00000184029	DSCR4	placenta	2	0.9806
ENSG00000184481	FOXO4	placenta	171.9	0.9107
ENSG00000185269	NOTUM	placenta	191.3	0.9963
ENSG00000185559	DLK1	placenta	2319	0.9782
ENSG00000186652	PRG2	placenta	3847.6	0.9990
ENSG00000187123	LYPD6	placenta	22.4	0.9004
ENSG00000187498	COL4A1	placenta	1227.8	0.9421
ENSG00000187513	GJA4	placenta	88.6	0.8709
ENSG00000187714	SLC18A3	placenta	0.6	0.9583
ENSG00000187772	LIN28B	placenta	67.2	0.9978
ENSG00000188676	IDO2	placenta	5.8	0.9746
ENSG00000188984	AADACL3	placenta	1.3	0.9744
ENSG00000189052	CGB5	placenta	31.7	0.9982
ENSG00000189120	SP6	placenta	32.3	0.9499
ENSG00000189253	TRIM64B	placenta	3	0.9944
ENSG00000196266	OR10J3	placenta	0.6	1.0000
ENSG00000196565	HBG2	placenta	20295.9	0.9996
ENSG00000196569	LAMA2	placenta	148.7	0.9275
ENSG00000197594	ENPP1	placenta	62.4	0.8937
ENSG00000197683	KRTAP26-1	placenta	1.9	0.9985
ENSG00000197769	MAP1LC3C	placenta	16	0.9002
ENSG00000197977	ELOVL2	placenta	49.8	0.9179
ENSG00000198223	CSF2RA	placenta	93.5	0.9015
ENSG00000198759	EGFL6	placenta	913.7	0.9977
ENSG00000203857	HSD3B1	placenta	110.1	0.9952
ENSG00000204262	COL5A2	placenta	152.7	0.8126
ENSG00000204291	COL15A1	placenta	309.7	0.9025
ENSG00000204414	CSHL1	placenta	216.4	0.9997
ENSG00000204450	TRIM64	placenta	1.1	1.0000
ENSG00000204595	DPRX	placenta	1.9	0.9722
ENSG00000204632	HLA-G	placenta	14.8	0.9955
ENSG00000204941	PSG5	placenta	157.4	0.9990
ENSG00000205864	KRTAP5-6	placenta	0.6	0.9815
ENSG00000206538	VGLL3	placenta	57.4	0.9072
ENSG00000213030	CGB8	placenta	29.2	0.9993
ENSG00000213218	CSH2	placenta	3928.4	0.9997
ENSG00000213934	HBG1	placenta	253.1	0.9996
ENSG00000214336	FOXI3	placenta	7.3	0.9958
ENSG00000214376	VSTM5	placenta	6.5	0.9175
ENSG00000215183	MSMP	placenta	1.8	0.9753
ENSG00000215595	C20orf202	placenta	4.8	0.9161
ENSG00000218336	TENM3	placenta	18.7	0.8372

ENSG00000221826	PSG3	placenta	188.4	0.9995
ENSG00000221878	PSG7	placenta	7.1	0.9887
ENSG00000231924	PSG1	placenta	362.6	0.9997
ENSG00000235750	KIAA0040	placenta	142.4	0.8784
ENSG00000240563	L1TD1	placenta	16.5	0.9449
ENSG00000242221	PSG2	placenta	342.1	0.9997
ENSG00000242265	PEG10	placenta	659.4	0.9733
ENSG00000242950	ERVW-1	placenta	77.1	0.9868
ENSG00000243130	PSG11	placenta	73.9	0.9996
ENSG00000244476	ERVFRD-1	placenta	51.4	0.9778
ENSG00000249861	LGALS16	placenta	7.6	0.9996
ENSG00000254535	PABPC4L	placenta	14.5	0.8776
ENSG00000254656	RTL1	placenta	4.8	0.9821
ENSG00000254979	RP11-872D17.8	placenta	10.5	0.9111
ENSG00000259384	GH1	placenta	1.2	0.9352
ENSG00000261371	PECAM1	placenta	654.4	0.9077
ENSG00000265107	GJA5	placenta	122.1	0.9403
ENSG00000266265	KLF14	placenta	1.1	0.9242
ENSG00000267534	S1PR2	placenta	26.9	0.8274
ENSG00000268964	ERVV-2	placenta	13.5	0.9994
ENSG00000269526	ERVV-1	placenta	21.9	0.9991
ENSG00000272602	ZNF595	placenta	87.4	0.9007
ENSG00000273820	USP27X	placenta	19.6	0.8268
ENSG00000275034	TP53TG3E	placenta	0.2	0.9861
ENSG00000279346	AC104389.1	placenta	11.1	0.9987
ENSG00000279824	AC104389.2	placenta	2.6	0.9979
ENSG00000003096	KLHL13	endometrium	52.2	0.8496
ENSG00000005073	HOXA11	endometrium	96	0.9525
ENSG00000026559	KCNG1	endometrium	23.4	0.8922
ENSG00000050628	PTGER3	endometrium	114.7	0.9060
ENSG00000066583	ISOC1	endometrium	174.3	0.8408
ENSG00000070047	PHRF1	endometrium	4.5	0.8068
ENSG00000072952	MRVI1	endometrium	98.6	0.8001
ENSG00000077157	PPP1R12B	endometrium	363.9	0.8188
ENSG00000078098	FAP	endometrium	50.4	0.8659
ENSG00000082175	PGR	endometrium	171.3	0.9446
ENSG00000091831	ESR1	endometrium	179.7	0.9322
ENSG00000099953	MMP11	endometrium	122.3	0.9750
ENSG00000102174	PHEX	endometrium	3.5	0.8246
ENSG00000103888	CEMIP	endometrium	54.5	0.9194
ENSG00000105419	MEIS3	endometrium	82.2	0.8597
ENSG00000105880	DLX5	endometrium	20.1	0.9116
ENSG00000111087	GLI1	endometrium	15.1	0.8352
ENSG00000113212	PCDHB7	endometrium	6.6	0.8388
ENSG00000114251	WNT5A	endometrium	46.3	0.8635
ENSG00000122133	PAEP	endometrium	437.4	0.9912
ENSG00000122420	PTGFR	endometrium	30.3	0.8604
ENSG00000122691	TWIST1	endometrium	30.7	0.8902
ENSG00000124391	IL17C	endometrium	3.5	0.9881
ENSG00000124766	SOX4	endometrium	80.4	0.8380
ENSG00000125498	KIR2DL1	endometrium	0.4	1.0000
ENSG00000127578	WFIKKN1	endometrium	0.1	0.9167
ENSG00000128709	HOXD9	endometrium	45.3	0.9054
ENSG00000128710	HOXD10	endometrium	48	0.9510
ENSG00000128713	HOXD11	endometrium	5.9	0.9605
ENSG00000128918	ALDH1A2	endometrium	117.2	0.8485
ENSG00000129009	ISLR	endometrium	198.5	0.8093
ENSG00000129116	PALLD	endometrium	441.6	0.8121
ENSG00000132329	RAMP1	endometrium	233.7	0.8680
ENSG00000133105	RXFP2	endometrium	0.8	0.9236
ENSG00000133107	TRPC4	endometrium	18.5	0.8979
ENSG00000133466	C1QTNF6	endometrium	52.2	0.9030
ENSG00000134198	TSPAN2	endometrium	71.2	0.8461
ENSG00000134200	TSHB	endometrium	1.7	0.8824
ENSG00000134533	RERG	endometrium	140.7	0.8222
ENSG00000135502	SLC26A10	endometrium	0.5	0.9222
ENSG00000136378	ADAMTS7	endometrium	7.2	0.8291
ENSG00000139926	FRMD6	endometrium	125.3	0.8012
ENSG00000140945	CDH13	endometrium	82.5	0.8273
ENSG00000143768	LEFTY2	endometrium	270.5	0.9849
ENSG00000145808	ADAMTS19	endometrium	16.4	0.9407
ENSG00000146374	RSPO3	endometrium	102.8	0.8545
ENSG00000149090	PAMR1	endometrium	91.9	0.8438
ENSG00000149451	ADAM33	endometrium	102.9	0.8146
ENSG00000149968	MMP3	endometrium	58.7	0.9703

ENSG00000152527	PLEKHH2	endometrium	31.8	0.8038
ENSG00000159674	SPON2	endometrium	105.3	0.8396
ENSG00000163501	IHH	endometrium	31.4	0.9001
ENSG00000163792	TCF23	endometrium	33.7	0.9257
ENSG00000164107	HAND2	endometrium	83.7	0.8298
ENSG00000164484	TMEM200A	endometrium	64.8	0.8870
ENSG00000164736	SOX17	endometrium	32.1	0.8677
ENSG00000164920	OSR2	endometrium	204.6	0.8896
ENSG00000166670	MMP10	endometrium	443.1	0.9984
ENSG00000167346	MMP26	endometrium	23.8	0.9993
ENSG00000169218	RSPO1	endometrium	43.3	0.9200
ENSG00000170049	KCNAB3	endometrium	14.5	0.9169
ENSG00000170166	HOXD4	endometrium	23.5	0.8552
ENSG00000170370	EMX2	endometrium	114.7	0.8866
ENSG00000177363	LRRN4CL	endometrium	16.8	0.8006
ENSG00000177519	RPRM	endometrium	21.9	0.8617
ENSG00000178031	ADAMTSL1	endometrium	20.7	0.8600
ENSG00000179300	ZCCHC5	endometrium	0.7	0.9206
ENSG00000180269	GPR139	endometrium	0.3	0.9907
ENSG00000180447	GAS1	endometrium	110.4	0.8679
ENSG00000183578	TNFAIP8L3	endometrium	118.6	0.9171
ENSG00000185630	PBX1	endometrium	246.5	0.8259
ENSG00000186860	KRTAP17-1	endometrium	0.1	1.0000
ENSG00000188133	TMEM215	endometrium	4.8	0.9554
ENSG00000197361	FBXL22	endometrium	45.1	0.8729
ENSG00000197410	DCHS2	endometrium	4	0.8181
ENSG00000198535	C2CD4A	endometrium	2.3	0.8309
ENSG00000204335	SP5	endometrium	3.9	0.8661
ENSG00000204969	PCDHA2	endometrium	1	0.8611
ENSG00000232237	ASCL5	endometrium	0.6	0.8657
ENSG00000249992	TMEM158	endometrium	32.5	0.8475
ENSG00000251184	RP11-101E3.5	endometrium	0.6	0.8380
ENSG00000253293	HOXA10	endometrium	116.3	0.9204
ENSG00000253304	TMEM200B	endometrium	68	0.8496
ENSG00000254726	MEX3A	endometrium	5.9	0.8663
ENSG00000257184	HOXA10-HOXA9	endometrium	1	0.9556
ENSG00000259752	AC066615.1	endometrium	2.1	0.8690
ENSG00000278845	MRPL45	endometrium	10.2	0.8145
ENSG00000279068	CH17-140K24.5	endometrium	1.6	0.8281
ENSG00000279261	AL360294.1	endometrium	0.1	0.8056
ENSG00000280178	AP000349.2	endometrium	4	0.9340
ENSG00000281137	AC074033.1	endometrium	2	0.9875

Appendix 6 - Literature sources and maternal/fetal expression information for genes associated with complications of pregnancy or fertility-related conditions:

Gene symbol/Ensembl ID	Alternate gene name(s)	Associated literature (Pubmed ID) and/or database entries	Maternal/fetal expression; other notes	Associated diseases or conditions
ABRAXAS1_ENSG00000163322	FAM175A	PMID: 22267201	maternal	menopause_menstrual_onset
ACVR1_ENSG00000115170	ACVR1	PMID: 24331737	mrna expression correlated with pe/pe onset/maternal	preeclampsia
ADGRL2_ENSG00000117114	LPHN2	PMID: 25599974 (EBI)	maternal	preterm_birth
ADRA1D_ENSG00000171873	ADRA1D	PMID: 23551011 (EBI)	maternal	preeclampsia
ADRB1_ENSG00000043591	ADRB1	PMID: 23202124 (EBI); PMID: 27680694	fetal	birth_weight
ADRB2_ENSG00000169252	ADRB2	PMID: 26715857	maternal/candidate gene approach	preterm_birth
AGTR2_ENSG00000180772	AGTR2	PMID: 28877031	maternal/assoc. with gestational duration and preterm birth	preterm_birth
AGT_ENSG00000135744	AGT	PMID: 21429808 (EBI); PMID: 26010865	candidate gene approach/maternal; regulator/target of susceptibility gene ided in 2014 paper/maternal	preeclampsia
ALCAM_ENSG00000170017	ALCAM	PMID: 28333195 (EBI)	maternal/ovarian disease with few adhesions	endometriosis_ovarian
ANXA5_ENSG00000164111	RPRGL3; ENX2	{Pregnancy loss, recurrent, susceptibility to, 1} - OMIM; "{Pregnancy loss, recurrent, susceptibility to, 3} - OMIM"	maternal	miscarriage
APOE_ENSG00000130203	APOE	PMID: 21429808 (EBI)	candidate gene approach/maternal	preeclampsia
AQP1_ENSG00000240583	AQP1	PMID: 23874842	meta-analysis/fetal	preeclampsia
ARHGEF7_ENSG00000102606	ARHGEF7	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
AR_ENSG00000169083	AR	PMID: 26715857	fetal/linkage study	preterm_birth
ASH2L_ENSG00000129691	ASH2L	PMID: 22267201 (EBI); PMID: 23307926 (EBI)	maternal	menopause_menstrual_onset
BAMBI_ENSG00000095739	BAMBI	PMID: 23551011 (EBI)	maternal	preeclampsia
BANP_ENSG00000172530	BANP	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
BCL6_ENSG00000113916	BCL6	PMID: 23874842	meta-analysis/fetal	preeclampsia
BHLHE40_ENSG00000134107	BHLHE40	PMID: 23874842	meta-analysis/fetal	preeclampsia
BRSK1_ENSG00000160469	BRSK1	PMID: 19448621 (EBI); PMID: 22269211	maternal	menopause_menstrual_onset
BUB3_ENSG00000154473	BUB3	PMID: 24045676 (EBI)	maternal	menopause_menstrual_onset
C18orf21_ENSG00000141428	C18orf21	PMID: 27506219 (EBI)	maternal/endometriosis	endometriosis_ovarian
C21orf91_ENSG00000154642	C21orf91	PMID: 28693416	fetal/placental gene network	fetal_growth_restriction
C7orf50_ENSG00000146540	C7orf50	PMID: 27506219 (EBI)	maternal/endometriosis	endometriosis_ovarian
CACNA2D1_ENSG00000153956	CACNA2D1	PMID: 25599974 (EBI); PMID: 28598419 (EBI)	maternal	preterm_birth
CALCR_ENSG00000004948	CALCR	PMID: 23202124 (EBI)	fetal	birth_weight
CAMK2B_ENSG00000058404	CAMK2B	PMID: 24046805	maternal	placental_abruption
CAPN14_ENSG00000214711	CAPN14	PMID: 28333195 (EBI)	maternal/endometriosis	endometriosis_ovarian
CCDC170_ENSG00000120262	CCDC170	PMID: 28537267 (EBI)	maternal/endometriosis	endometriosis_ovarian
CCL28_ENSG00000151882	CCL28	PMID: 27330572	fetal, methylation	fetal_growth_restriction
CCNL1_ENSG00000163660	CCNL1	PMID: 23202124 (EBI); PMID: 20372150 (EBI)	fetal	birth_weight
CDC42_ENSG00000070831	CDC42	PMID: 28171565; PMID: 23472165 (EBI)	maternal/expression regulated by risk alleles; maternal/endometriosis	endometriosis_ovarian
CDC73_ENSG00000134371	CDC73	PMID: 28333195 (EBI)	maternal/ovarian disease with few adhesions	endometriosis_ovarian
CDH20_ENSG00000101542	CDH20	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense	endometriosis_ovarian

			adhesions	
CDKAL1_ENSG00000145996	CDKAL1	PMID: 23202124 (EBI)	fetal	birth_weight
CDKN1C_ENSG00000129757	CDKN1C	PMID: 25057881; PMID: 16125225	mrna expression/fetal/paternally imprinted; fetal	fetal_growth_restriction
CDKN2A_ENSG00000147889	CDKN2A; ARF	PMID: 21151130 (EBI)	maternal/endometriosis	endometriosis_ovarian
CDKN2B-AS1_ENSG00000240498	CDKN2BAS; CDKN2B-AS1	PMID: 21151130; PMID: 28537267 (EBI); PMID: 24676469	maternal; maternal/endometriosis	endometriosis_ovarian
CDKN2B_ENSG00000147883	CDKN2B	PMID: 21151130	maternal/endometriosis	endometriosis_ovarian
CENPM_ENSG00000100162	CENPM	PMID: 23202124 (EBI)	fetal	birth_weight
CGA_ENSG00000135346	CGA	PMID: 23874842	meta-analysis/fetal	preeclampsia
CGB3_ENSG00000104827	CGB	PMID: 23874842	meta-analysis/fetal	preeclampsia
CGB5_ENSG00000189052	CGB	PMID: 23874842	meta-analysis/fetal	preeclampsia
CKAP2L_ENSG00000169607	CKAP2L	PMID: 20844546 (EBI)	maternal/endometriosis	endometriosis_ovarian
COL24A1_ENSG00000171502	COL24A1	PMID: 28598419 (EBI)	maternal	preterm_birth
COL4A1_ENSG00000187498	COL4A1	PMID: 24331737 ; PMID: 26715857	mrna expression correlated with pe/pe onset/maternal; maternal/candidate gene approach	preeclampsia; preterm_birth
COL4A2_ENSG00000134871	COL4A2	PMID: 24331737	mrna expression correlated with pe/pe onset/maternal	preeclampsia
COL4A3_ENSG00000169031	COL4A3	PMID: 26715857	maternal/candidate gene approach	preterm_birth
CORIN_ENSG00000145244	CORIN; TMPRSS10; ATC2	Preeclampsia/eclampsia 5 - OMIM	maternal	preeclampsia
COX10_ENSG00000006695	COX10	PMID: 25549360	fetal	placental_abruption
COX5A_ENSG00000178741	COX5A	PMID: 24046805	maternal	placental_abruption
CREB3_ENSG00000107175	CREB3	PMID: 28693416	fetal/placental gene network	fetal_growth_restriction
CRH_ENSG00000147571	CRH	PMID: 16125225; PMID: 23874842	mrna expression/fetal; meta-analysis/fetal	fetal_growth_restriction; preeclampsia
CRNKL1_ENSG00000101343	CRN	Preeclampsia/eclampsia 5 - OMIM	maternal	preeclampsia
CSMD1_ENSG00000183117	CSMD1	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
CTNNA2_ENSG00000066032	CTNNA2	PMID: 25549360	fetal	placental_abruption
CXCL12_ENSG00000107562	CXCL12	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
CXXC1_ENSG00000154832	SPP1	PMID: 23874842	meta-analysis/fetal	preeclampsia
CYP11A1_ENSG00000140459	CYP11A1	PMID: 23874842	meta-analysis/fetal	preeclampsia
DAB2_ENSG00000153071	DAB2	PMID: 9696034	fetal	gtd_hydatidiform-mole
DCP1A_ENSG00000272886	DCP1A	PMID: 25599974 (EBI)	maternal	preterm_birth
DDX3X_ENSG00000215301	DDX3X	PMID: 28693416	fetal/placental gene network	fetal_growth_restriction
DECR1_ENSG00000104325	DECR1	PMID: 27330572	fetal, methylation	fetal_growth_restriction
DEFA1_ENSG00000206047	DEFA1	PMID: 21151130 (EBI); PMID: 28333195 (EBI)	maternal/endometriosis	endometriosis_ovarian
DGKB_ENSG00000136267	DGKB	PMID: 23205182	maternal	placental_abruption
DMRTA1_ENSG00000176399	DMRTA1	PMID: 28537267 (EBI); PMID: 28333195 (EBI)	maternal/ovarian disease with few adhesions; maternal/endometriosis	endometriosis_ovarian
DNAJA4_ENSG00000140403	DNAJA4	PMID: 27330572	fetal, methylation	fetal_growth_restriction
DNAJC14_ENSG00000135392	DNAJC14	PMID: 28693416	fetal/placental gene network	fetal_growth_restriction
DOC2A_ENSG00000149927	DOC2A	PMID: 9696034	fetal	gtd_hydatidiform-mole
DOCK10_ENSG00000135905	DOCK10	PMID: 23307926 (EBI)	maternal	menopause_menstrual_onset
DPH6_ENSG00000134146	ATPBD4	PMID: 24045676 (EBI)	maternal	menopause_menstrual_onset
DUSP4_ENSG00000120875	DUSP4	PMID: 28598419 (EBI)	maternal	preterm_birth
DYNC1H1_ENSG00000197102	DYNC1H1	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
EBF1_ENSG00000164330	EBF1	PMID: 28877031	maternal/assoc. with gestational duration and preterm birth	preterm_birth
EBI3_ENSG00000105246	EBI3	PMID: 23874842	meta-analysis/fetal	preeclampsia
EEFSEC_ENSG00000132394	EEFSEC	PMID: 28877031	maternal/assoc. with gestational duration and preterm birth	preterm_birth

EMX2_ENSG00000170370	EMX2	PMID: 28333195 (EBI)	maternal/ovarian disease with few adhesions	endometriosis_ovarian
ENG_ENSG00000106991	ENG	PMID: 16751767; PMID: 23874842	seng elevated in pe patients/fetal; meta-analysis/fetal	preeclampsia
EPHX1_ENSG00000143819	EPHX	PMID: 21429808 (EBI)	candidate gene approach/maternal	preeclampsia
ERAP1_ENSG00000164307	ERAP1	PMID: 24331737	mrna expression correlated with pe/pe onset/maternal	preeclampsia
ERAP2_ENSG00000164308	ERAP2	PMID: 24331737	mrna expression correlated with pe/pe onset/maternal	preeclampsia
ERP44_ENSG00000023318	ERP44	PMID: 23551011 (EBI)	maternal	preeclampsia
ESR1_ENSG00000091831	ESR1	PMID: 28537267 (EBI); PMID: 22248077	maternal/endometriosis; maternal	endometriosis_ovarian; menopause_menstrual_onset
ESR2_ENSG00000140009	ESR2	PMID: 25264875	maternal/assoc with pprom, integrated snp/gene expression analysis	preterm_birth
ETAA1_ENSG00000143971	ETAA1	PMID: 28537267 (EBI)	maternal/endometriosis	endometriosis_ovarian
EXO1_ENSG00000174371	EXO1	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
EZR_ENSG00000092820	EZR	PMID: 23874842	meta-analysis/fetal	preeclampsia
F2_ENSG00000180210	THPH1; F2; RPRGL2 ; F2	PMID: 27842992; "{Pregnancy loss, recurrent, susceptibility to, 2} - OMIM"; PMID: 18277167; PMID: 21429808 (EBI); PMID: 23132613; PMID: 26715857	maternal; maternal/metaanalysis; meta-analysis of genetic association studies/maternal; candidate gene approach/maternal; maternal/candidate gene approach	miscarriage; placental_abruption; preeclampsia; preterm_birth
F5_ENSG00000198734	THPH2; F5	{Pregnancy loss, recurrent, susceptibility to, 1} - OMIM; PMID: 27842992; PMID: 18277167 ; PMID: 21429808 (EBI); PMID: 23132613; PMID: 23874842	maternal; maternal/metaanalysis; meta-analysis of genetic association studies/maternal; candidate gene approach/maternal; meta-analysis/fetal	miscarriage; placental_abruption; preeclampsia
FANCI_ENSG00000140525	FANCI	PMID: 22267201	maternal	menopause_menstrual_onset
FERMT1_ENSG00000101311	FERMT1	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
FGF14_ENSG00000102466	FGF14	PMID: 23551011 (EBI)	maternal	preeclampsia
FGF1_ENSG00000113578	FGF1	PMID: 26715857	maternal/candidate gene approach	preterm_birth
FLT1_ENSG00000102755	VEGFR1; FLT1	PMID: 21429808 (EBI); PMID: 28628106; PMID: 23874842	candidate gene approach/maternal; meta-analysis/fetal; fetal	preeclampsia
FN1_ENSG00000115414	FN1	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions	endometriosis_ovarian
FNDC4_ENSG00000115226	FNDC4	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
FOXP2_ENSG00000128573	FOXP2	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions	endometriosis_ovarian
FSHB_ENSG00000131808	FSHB	PMID: 28537267 (EBI); PMID: 26732621(EBI)	maternal/impairs fertility but protective against endometriosis; maternal/endometriosis; maternal/age at menarche	endometriosis_ovarian; menopause_menstrual_onset
FSTL3_ENSG00000070404	FSTL3	PMID: 23874842	meta-analysis/fetal	preeclampsia
FTO_ENSG00000140718	FTO	PMID: 25845303	maternal	miscarriage
GALNT13_ENSG00000144278	GALNT13	PMID: 17903295 (EBI)	maternal	menopause_menstrual_onset
GATM_ENSG00000171766	GATM	PMID: 16125225	mrna	fetal_growth_restriction

			expression/fetal/imprinted	
GCM2_ENSG00000124827	GCM2	PMID: 19448621 (EBI)	maternal	menopause_menstrual_onset
GLIS3_ENSG00000107249	GLIS3	PMID: 25599974 (EBI)	maternal	preterm_birth
GLRX_ENSG00000173221	GLRX	PMID: 16125225	mrna expression/fetal	fetal_growth_restriction
GNAS_ENSG00000087460	GNAS	PMID: 16125225	mrna expression/fetal/imprinted	fetal_growth_restriction
GNE_ENSG00000159921	GNE	PMID: 27330572	fetal, methylation	fetal_growth_restriction
GNG4_ENSG00000168243	GNG4	PMID: 17903295 (EBI)	maternal	menopause_menstrual_onset
GREB1_ENSG00000196208	GREB1	PMID: 28537267 (EBI); PMID: 24676469; PMID: 21151130 (EBI)	maternal; maternal/endometriosis	endometriosis_ovarian
GRHL1_ENSG00000134317	GRHL1	PMID: 28693416	fetal/placental gene network	fetal_growth_restriction
GSPT1_ENSG00000103342	GSPT1	PMID: 22267201 (EBI); PMID: 23307926 (EBI)	maternal	menopause_menstrual_onset
GSTK1_ENSG00000197448	GST	PMID: 21429808 (EBI)	candidate gene approach/maternal	preeclampsia
GSTO1_ENSG00000148834	GSTO1	PMID: 27330572	fetal, methylation	fetal_growth_restriction
H19_ENSG00000130600	H19	PMID: 25549360	maternal/fetal	placental_abruption
HELQ_ENSG00000163312	HELQ	PMID: 22267201 (EBI); PMID: 22267201	maternal	menopause_menstrual_onset
HEXB_ENSG00000049860	HEXB	PMID: 23874842	meta-analysis/fetal	preeclampsia
HGF_ENSG00000019991	HGF	PMID: 28598419 (EBI)	maternal	preterm_birth
HK3_ENSG00000160883	HK3	PMID: 19448621; PMID: 22248077	maternal	menopause_menstrual_onset
HMGA1_ENSG00000137309	HMGA1	PMID: 27680694	fetal	birth_weight
HMGA2_ENSG00000149948	HMGA2	PMID: 23202124 (EBI)	fetal	birth_weight
HPGD_ENSG00000164120	HPGD	PMID: 16125225	mrna expression/fetal	fetal_growth_restriction
HSD17B1_ENSG00000108786	HSD17B1	PMID: 23874842	meta-analysis/fetal	preeclampsia
HSPA1A_ENSG00000204389	HSPA1A	PMID: 27330572	fetal, methylation	fetal_growth_restriction
HSPA1L_ENSG00000204390	HSPA1L	PMID: 27330572	fetal, methylation	fetal_growth_restriction
HTRA1_ENSG00000166033	HTRA1	PMID: 23874842	meta-analysis/fetal	preeclampsia
HTRA4_ENSG00000169495	HTRA4	PMID: 23874842	meta-analysis/fetal	preeclampsia
ID4_ENSG00000172201	ID4	PMID: 28333195 (EBI); PMID: 28537267 (EBI); PMID: 24676469; PMID: 23472165 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions; maternal; maternal/endometriosis	endometriosis_ovarian
IDO1_ENSG00000131203	INDO	PMID: 16125225	mrna expression/fetal	fetal_growth_restriction
IFNG_ENSG00000111537	IFNG	PMID: 27842992 ; PMID: 26010865 ; PMID: 26715857	maternal/metaanalysis; regulator/target of susceptibility gene ided in 2014 paper/maternal; maternal/candidate gene approach	miscarriage; preeclampsia; preterm_birth
IGF1R_ENSG00000140443	IGF1R	PMID: 27506219 (EBI) ; PMID: 20817666; PMID: 14657428	maternal/endometriosis; maternal; fetal	endometriosis_ovarian; fetal_growth_restriction
IGF1_ENSG00000017427	IGF1	PMID: 16125225; PMID: 26823688; PMID: 20817666; PMID: 14657428 ; PMID: 23298525	fetal/mrna/methylation; mrna expression/fetal; maternal; fetal; maternal/integrated snp/gene pathway analysis	fetal_growth_restriction; preterm_birth
IGF2R_ENSG00000197081	IGF2R	PMID: 20817666	fetal/maternal	fetal_growth_restriction
IGF2_ENSG00000167244	IGF2	PMID: 12087403; PMID: 20817666; PMID: 16125225; PMID: 25549360 ; PMID: 26715857	fetal/maternal; mrna expression/fetal/maternally imprinted; fetal; maternal/fetal; maternal/candidate gene approach	fetal_growth_restriction; placental_abruption; preterm_birth
IGFBP1_ENSG00000146678	IGFBP1	PMID: 18219215; PMID: 26823688; PMID: 23874842	fetal/mrna/methylation; maternal; meta-analysis/fetal	fetal_growth_restriction; preeclampsia
IGFBP2_ENSG00000115457	IGFBP2	PMID: 26823688 ; PMID: 18219215	fetal/mrna/methylation; maternal	fetal_growth_restriction
IGFBP3_ENSG00000146674	IGFBP3	PMID: 26823688; PMID: 18219215	fetal/mrna/methylation; fetal/maternal	fetal_growth_restriction
IGFBP4_ENSG00000141753	IGFBP4	PMID: 18219215; PMID:	fetal/mrna/methylation;	fetal_growth_restriction

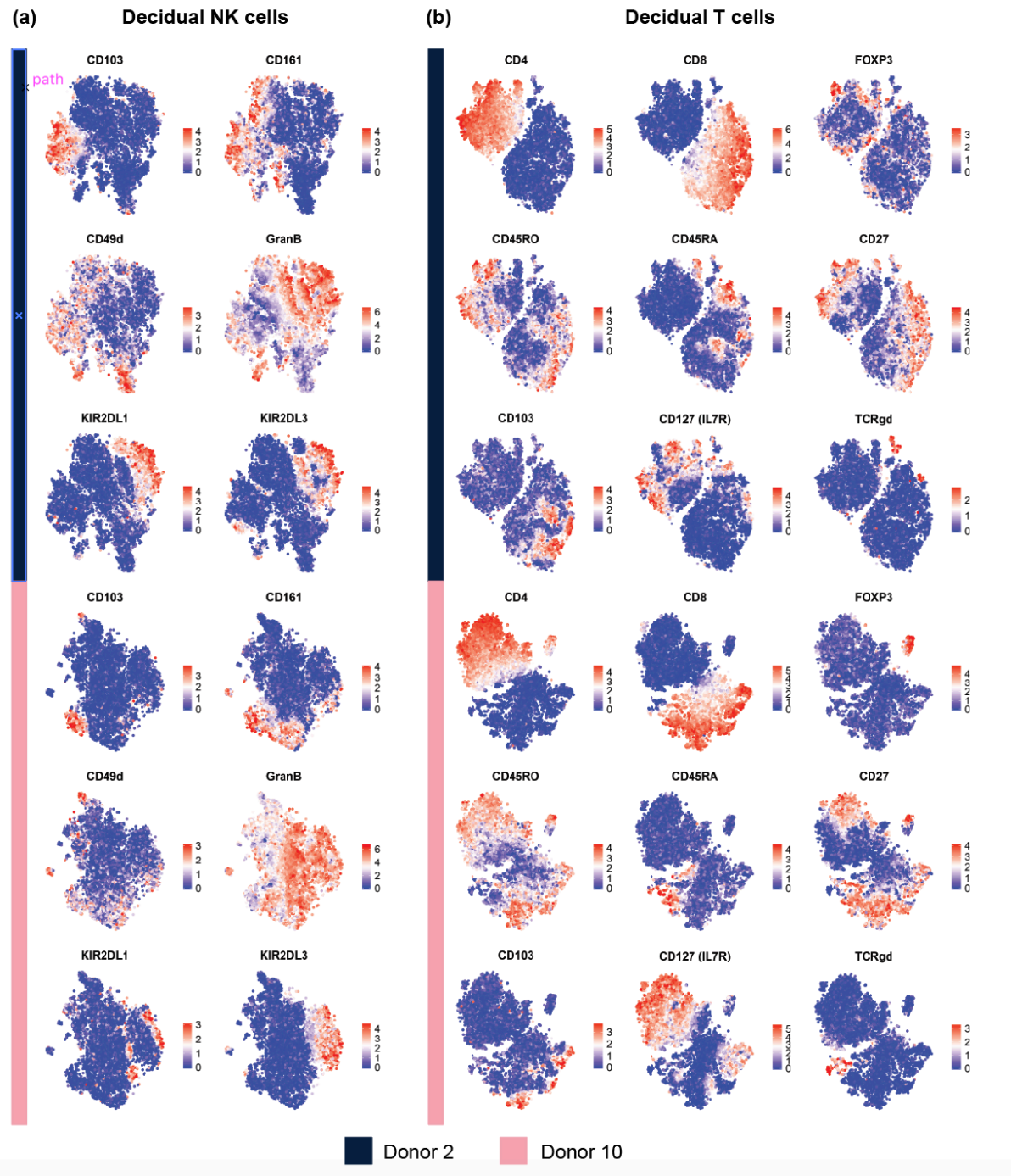|				
		26823688	fetal/maternal	
IGFBP5_ENSG00000115461	IGFBP5	PMID: 18219215	fetal/maternal	fetal_growth_restriction
IGFBP6_ENSG00000167779	IGFBP6	PMID: 18219215	maternal	fetal_growth_restriction
IGFBP7_ENSG00000163453	IGFBP7	PMID: 26823688	fetal/mrna/methylation	fetal_growth_restriction
IL10_ENSG00000136634	IL10	PMID: 27842992; PMID: 21429808 (EBI)	maternal/metaanalysis; candidate gene approach/maternal	miscarriage; preeclampsia
IL11_ENSG00000095752	IL11	PMID: 22267201	maternal	menopause_menstrual_onset
IL1A_ENSG00000115008	IL1A	PMID: 25336714; PMID: 28537267 (EBI); PMID: 20844546 (EBI)	maternal; maternal/endometriosis	endometriosis_ovarian
IL1B_ENSG00000125538	IL1B	PMID: 28537267 (EBI)	maternal/endometriosis	endometriosis_ovarian
IL1RN_ENSG00000136689	IL1RN	PMID: 26715857	maternal/candidate gene approach	preterm_birth
IL2RG_ENSG00000147168	IL2RG	PMID: 26715857	fetal/linkage study	preterm_birth
IL2_ENSG00000109471	IL2	PMID: 26715857	maternal/candidate gene approach	preterm_birth
IL33_ENSG00000137033	IL33	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
IL6R_ENSG00000160712	IL6R	PMID: 26715857	maternal/candidate gene approach; fetal	preterm_birth
IL6_ENSG00000136244	IL6	PMID: 26010865	regulator/target of susceptibility gene ided in 2014 paper/maternal	preeclampsia
INHA_ENSG00000123999	INHA	PMID: 24331737; PMID: 23874842	meta-analysis/fetal; mrna expression correlated with pe/pe onset/maternal	preeclampsia
INHBA_ENSG00000122641	INHBA	PMID: 16125225 ; PMID: 26010865; PMID: 23874842	mrna expression/fetal; meta-analysis/fetal; regulator/target of susceptibility gene ided in 2014 paper/maternal	fetal_growth_restriction; preeclampsia
INHBB_ENSG00000163083	INHBB	PMID: 24331737; PMID: 22432041	maternal; mrna expression correlated with pe/pe onset/maternal	preeclampsia
INVS_ENSG00000119509	INVS	PMID: 23551011 (EBI)	maternal	preeclampsia
IRF3_ENSG00000126456	IRF3	PMID: 25264875	maternal/integrated snp/gene expression analysis	preterm_birth
ITPK1_ENSG00000100605	ITPK1	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
KDR_ENSG00000128052	VEGFR2; KDR ; VEGFR2	PMID: 27453397 ; PMID: 28537267 (EBI); PMID: 27453397 ; PMID: 16310040	maternal; maternal/endometriosis; fetal	endometriosis_ovarian; placenta_accreta
KHDC3L_ENSG00000203908	KHDC3L; ECAT1	Hydatidiform mole, recurrent, 2 - OMIM	omim/maternal	gtd_hydatidiform-mole
KIR3DL1_ENSG00000167633	KIR	PMID: 27842992	maternal/metaanalysis	miscarriage
KMT5C_ENSG00000133247	SUV420H2	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
KPNA3_ENSG00000102753	KPNA3	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
KRT19_ENSG00000171345	KRT19	PMID: 23874842	meta-analysis/fetal	preeclampsia
KSR2_ENSG00000171435	KSR2	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
LAMC3_ENSG00000050555	LAMC3	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions; maternal/endometriosis	endometriosis_ovarian
LCORL_ENSG00000178177	LCORL	PMID: 23202124 (EBI)	fetal	birth_weight
LEKR1_ENSG00000197980	LEKR1	PMID: 23202124 (EBI); PMID: 20372150 (EBI)	fetal	birth_weight
LEPR_ENSG00000116678	LEPR	PMID: 27330572	fetal, methylation	fetal_growth_restriction
LEP_ENSG00000174697	LEP	PMID: 16125225; PMID: 23874842	mrna expression/fetal; meta-analysis/fetal	fetal_growth_restriction; preeclampsia
LHB_ENSG00000104826	LHB	PMID: 23874842	meta-analysis/fetal	preeclampsia
LHFPL6_ENSG00000183722	LHFP	PMID: 23551011 (EBI)	maternal	preeclampsia
LIN28B_ENSG00000187772	LIN28B	PMID: 19448621	maternal	menopause_menstrual_onset
LINC00339_ENSG00000218510	LINC00339	PMID: 28171565	maternal/expression regulated by risk alleles	endometriosis_ovarian
LNPEP_ENSG00000113441	LNPEP	PMID: 24331737	mrna expression	preeclampsia

			correlated with pe/pe onset/maternal	
LOC100506403_ENSG0000015921 6	RUNX1	PMID: 23551011 (EBI)	maternal	preeclampsia
LRRC28_ENSG00000168904	LRRC28	PMID: 28598419 (EBI)	maternal	preterm_birth
LRRN4_ENSG00000125872	LRRN4	PMID: 19448619 (EBI)	maternal	menopause_menstrual _onset
LTF_ENSG00000012223	LTF	PMID: 26715857	maternal/candidate gene approach	preterm_birth
LZTS1_ENSG00000061337	LZTS1	PMID: 23551011 (EBI)	maternal	preeclampsia
MAN1A1_ENSG00000111885	MAN1A1	PMID: 25599974 (EBI)	maternal	preterm_birth
MAP3K4_ENSG00000085511	MAP3K4	PMID: 28333195 (EBI)	maternal/ovarian disease with few adhesions	endometriosis_ovarian
MBL2_ENSG00000165471	MBL	PMID: 27842992	maternal/metaanalysis	miscarriage
MCM8_ENSG00000125885	MCM8	PMID: 19448619 (EBI); PMID: 23307926 (EBI); PMID: 19448621 (EBI); PMID: 19448621; PMID: 22267201 (EBI); PMID: 20952801 ; PMID: 23551011 (EBI)	maternal	menopause_menstrual _onset; preeclampsia
MEF2A_ENSG00000068305	MEF2A	PMID: 28598419 (EBI)	maternal	preterm_birth
MEF2C_ENSG00000081189	MEF2C	PMID: 27664809	na	preterm_birth
MEG3_ENSG00000214548	MEG3	PMID: 16125225	mrna expression/fetal/paternal ly imprinted	fetal_growth_restriction
MEIS1_ENSG00000143995	MEIS1	PMID: 27506219 (EBI)	maternal/endometriosis	endometriosis_ovarian
MEST_ENSG00000106484	MEST	PMID: 16125225	mrna expression/fetal/matern ally imprinted	fetal_growth_restriction
MIR17HG_ENSG00000215417	MIR17HG	PMID: 23205182		placental_abruption
MMP14_ENSG00000157227	MMP14	PMID: 23470162	fetal/mrna expression	fetal_growth_restriction
MMP1_ENSG00000196611	MMP1	PMID: 22406112	maternal	miscarriage
MMP2_ENSG00000087245	MMP2	PMID: 17367869; PMID: 22406112 ; PMID: 23316964	fetal; maternal	fetal_growth_restriction; miscarriage; preeclampsia
MMP3_ENSG00000149968	MMP3	PMID: 22406112	maternal	miscarriage
MMP9_ENSG00000100985	MMP9	PMID: 17367869; PMID: 22406112 ; PMID: 23316964	fetal; maternal	fetal_growth_restriction; miscarriage; preeclampsia
MOAP1_ENSG00000165943	MOAP1	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
MTHFD1_ENSG00000100714	MTHFD1	PMID: 18277167	maternal	placental_abruption
MTHFR_ENSG00000177000	MTHFR	PMID: 27842992 ; PMID: 18277167 ; PMID: 21429808 (EBI)	maternal/metaanalysis; maternal; candidate gene approach/maternal	miscarriage; placental_abruption; preeclampsia
MUC21_ENSG00000204544	MUC21	PMID: 23551011 (EBI)	maternal	preeclampsia
MUC22_ENSG00000261272	MUC22	PMID: 23551011 (EBI)	maternal	preeclampsia
MYCBP2_ENSG00000005810	MYCBP2	PMID: 23551011 (EBI)	maternal	preeclampsia
NAALADL2_ENSG00000177694	NAALADL2	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions	endometriosis_ovarian
NANOS3_ENSG00000187556	NOS3	PMID: 21429808 (EBI); "{Hypertension, pregnancy-induced} - OMIM"	candidate gene approach/maternal; maternal	preeclampsia
NDUFB6_ENSG00000165264	NDUFB6	PMID: 24046805	maternal	placental_abruption
NECTIN4_ENSG00000143217	PVRL4	PMID: 23874842	meta-analysis/fetal	preeclampsia
NFE2L3_ENSG00000050344	NFE2L3	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions; maternal/endometriosis	endometriosis_ovarian
NFKB1_ENSG00000109320	NFKB1	PMID: 25264875	maternal/integrated snp/gene expression analysis	preterm_birth
NLRP11_ENSG00000179873	NLRP11	PMID: 22267201 (EBI); PMID: 22267201; PMID: 23307926 (EBI)	maternal	menopause_menstrual _onset
NLRP7_ENSG00000167634	PYPAF3; NLRP7; NOD12;	Hydatidiform mole, recurrent, 1 - OMIM; https://academic.oup.com/	omim/maternal; maternal	gtd_hydatidiform-mole

	NALP7	hmg/article/18/5/888/615820		
NOS3_ENSG00000164867	NOS3	PMID: 27842992; {Placental abruption} - OMIM; PMID: 18277167 ; PMID: 21429808 (EBI); "{Hypertension, pregnancy-induced} - OMIM"	maternal/metaanalysis; maternal; candidate gene approach/maternal	miscarriage; placental_abruption; preeclampsia
NOTCH1_ENSG00000148400	NOTCH1	PMID: 26732621(EBI)	maternal/age at menarche	menopause_menstrual_onset
NPVF_ENSG00000105954	NPVF	PMID: 23551011 (EBI)	maternal	preeclampsia
NR1H3_ENSG00000025434	NR1H3	PMID: 24046805	maternal	placental_abruption
NR3C1_ENSG00000113580	NR3C1	PMID: 25264875	maternal/integrated snp/gene expression analysis	preterm_birth
NRIP1_ENSG00000180530	NRIP1	PMID: 27680694	fetal	birth_weight
NTRK2_ENSG00000148053	NTRK2	PMID: 24950379 (EBI)	fetal	birth_weight
NYAP2_ENSG00000144460	NYAP2	PMID: 23307926 (EBI)	maternal	menopause_menstrual_onset
OPCML_ENSG00000183715	OPCML	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
OR1D2_ENSG00000184166	OR1D2	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
OR1G1_ENSG00000183024	OR1G1	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
PAEP_ENSG00000122133	PAEP	PMID: 21880722	fetal	gtd_hydatidiform-mole
PAPPA2_ENSG00000116183	PAPPA2	PMID: 23874842	meta-analysis/fetal	preeclampsia
PAPPA_ENSG00000182752	PAPPA	PMID: 14973274	fetal	fetal_growth_restriction; preeclampsia
PDE1C_ENSG00000154678	PDE1C	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
PGF_ENSG00000119630	PGF	PMID: 23874842	meta-analysis/fetal	preeclampsia
PHLDA2_ENSG00000181649	PHLDA2	PMID: 16125225	mrna expression/fetal/paternally imprinted	fetal_growth_restriction
PHYHIP_ENSG00000168490	PHYHIP	PMID: 23874842	meta-analysis/fetal	preeclampsia
PIK3CG_ENSG00000105851	PIK3CG	PMID: 19448619 (EBI)	maternal	menopause_menstrual_onset
PLAGL1_ENSG00000118495	PLAGL1	PMID: 16125225	mrna expression/fetal/imprinted	fetal_growth_restriction
PLEC_ENSG00000178209	PLEC	PMID: 23874842	meta-analysis/fetal	preeclampsia
PLPPR3_ENSG00000129951	PRG2	PMID: 21865357	circulating protein levels/maternal/fetal	preeclampsia
POLG_ENSG00000140521	POLG	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
PPARG_ENSG00000132170	PPARG	PMID: 24046805; PMID: 25549360 ; PMID: 25264875	maternal; maternal/fetal; maternal/integrated snp/gene expression analysis	placental_abruption; preterm_birth
PRG2_ENSG00000186652	PRG2	PMID: 21865357	circulating protein levels/maternal/fetal	preeclampsia
PRIM1_ENSG00000198056	PRIM1	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
PRKCA_ENSG00000154229	PRKCA	PMID: 24046805	maternal	placental_abruption
PROZ_ENSG00000126231	PROZ	PMID: 27842992	maternal/metaanalysis	miscarriage
PRRC2A_ENSG00000204469	PRRC2A	PMID: 22267201 (EBI); PMID: 23307926 (EBI)	maternal	menopause_menstrual_onset
PSG11_ENSG00000243130	PSG11	PMID: 22748001	maternal	preeclampsia
PSG4_ENSG00000243137	PSG4	PMID: 16125225	mrna expression/fetal	fetal_growth_restriction
PSG9_ENSG00000183668	PSG11	PMID: 22748001	maternal	preeclampsia
PTCH1_ENSG00000185920	PTCH1	PMID: 27680694	fetal	birth_weight
PTGDR_ENSG00000168229	AS1	PMID: 24045676 (EBI)	maternal	menopause_menstrual_onset
PXDN_ENSG00000130508	PRG2	PMID: 21865357	circulating protein levels/maternal/fetal	preeclampsia
RAP2C_ENSG00000123728	RAP2C	PMID: 28877031	maternal/assoc. with gestational duration	preterm_birth
RBM43_ENSG00000184898	RBM43	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
RCAN1_ENSG00000159200	DSCR1	PMID: 16125225	mrna expression/fetal	fetal_growth_restriction
RDH13_ENSG00000160439	RDH13	PMID: 23874842	meta-analysis/fetal	preeclampsia
RHBDL2_ENSG00000158315	RHBDL2	PMID: 22267201 (EBI)	maternal	menopause_menstrual_onset
RHOU_ENSG00000116574	RHOU	PMID: 20844546 (EBI)	maternal/endometriosis	endometriosis_ovarian
RNASET2_ENSG00000026297	RNASET2	PMID: 25599974 (EBI)	maternal	preterm_birth

RND3_ENSG00000115963	RND3	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
RNF144B_ENSG00000137393	RNF144B	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
RNF44_ENSG00000146083	RNF44	PMID: 22267201 (EBI)	maternal	menopause_menstrual _onset
RTN4RL1_ENSG00000185924	RTN4RL1	PMID: 27453397	maternal	endometriosis_ovarian
SASH1_ENSG00000111961	SASH1	PMID: 23874842	meta-analysis/fetal	preeclampsia
SCN2B_ENSG00000149575	SCN2B	PMID: 23551011 (EBI)	maternal	preeclampsia
SCN4B_ENSG00000177098	SCN4B	PMID: 23551011 (EBI)	maternal	preeclampsia
SEMA4C_ENSG00000168758	SEMA4C	PMID: 23874842	meta-analysis/fetal	preeclampsia
SERPINE1_ENSG00000106366	SERPINE1	PMID: 27842992; PMID: 21429808 (EBI); PMID: 26010865	maternal/metaanalysis; candidate gene approach/maternal; regulator/target of susceptibility gene ided in 2014 paper/maternal	miscarriage; preeclampsia
SFR1_ENSG00000156384	SFR1	PMID: 23551011 (EBI)	maternal	preeclampsia
SGIP1_ENSG00000118473	SGIP1	PMID: 23307926 (EBI)	maternal	menopause_menstrual _onset
SIGLEC6_ENSG00000105492	SIGLEC6	PMID: 23089140; PMID: 23874842	fetal; meta-analysis/fetal	gtd_hydatidiform-mole; preeclampsia
SLC2A4_ENSG00000181856	SLC2A4	PMID: 23202124 (EBI)	fetal	birth_weight
SLC44A4_ENSG00000204385	SLC44A4	PMID: 19448619 (EBI)	maternal	menopause_menstrual _onset
SLCO2A1_ENSG00000174640	SLCO2A1	PMID: 23874842	meta-analysis/fetal	preeclampsia
SMAD2_ENSG00000175387	SMAD2	PMID: 23205182	maternal	placental_abruption
SMAD9_ENSG00000120693	SMAD9	PMID: 25599974 (EBI)	maternal	preterm_birth
SOD1_ENSG00000142168	SOD1	PMID: 23874842	meta-analysis/fetal	preeclampsia
SORCS1_ENSG00000108018	SORCS1	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
SORL1_ENSG00000137642	SORL1	PMID: 25599974 (EBI)	maternal	preterm_birth
SPAG4_ENSG00000061656	SPAG4	PMID: 23874842	meta-analysis/fetal	preeclampsia
SPP1_ENSG00000118785	SPP1	PMID: 23874842	meta-analysis/fetal	preeclampsia
STAT1_ENSG00000115415	STAT1	PMID: 25264875	maternal/assoc with pprom, integrated snp/gene expression analysis	preterm_birth
STC2_ENSG00000113739	STC2	PMID: 25533459	fetal	fetal_growth_restriction
STOX1_ENSG00000165730	STOX1	Preeclampsia/eclampsia 4 - OMIM	maternal	preeclampsia
SYCP2L_ENSG00000153157	SYCP2L	PMID: 19448621 (EBI); PMID: 22267201 (EBI)	maternal	menopause_menstrual _onset
SYCP3_ENSG00000139351	RPRGL4; SPGF4; COR1; SYCP3; SCP3	Pregnancy loss, recurrent, 4 - OMIM	maternal	miscarriage
SYNE1_ENSG00000131018	SYNE1	PMID: 28537267 (EBI)	maternal/endometriosis	endometriosis_ovarian
TDRD3_ENSG00000083544	TDRD3	PMID: 22267201 (EBI)	maternal	menopause_menstrual _onset
TEK_ENSG00000120156	TIE2	PMID: 16458662	fetal	placenta_accreta
TENM3_ENSG00000218336	TENM3	PMID: 23551011 (EBI)	maternal	preeclampsia
TGFB1_ENSG00000105329	TGFB1	PMID: 26010865	regulator/target of susceptibility gene ided in 2014 paper/maternal	preeclampsia
TGFBRAP1_ENSG00000135966	TGFBRAP1	PMID: 23551011 (EBI)	maternal	preeclampsia
THRB_ENSG00000151090	THRB	PMID: 24046805; PMID: 25549360	maternal; fetal	placental_abruption
TIMP2_ENSG00000035862	TIMP2	PMID: 26715857	maternal/candidate gene approach	preterm_birth
TIMP3_ENSG00000100234	TIMP3	PMID: 20442742; PMID: 23172037	hypomethylation/fetal	preeclampsia
TLE4_ENSG00000106829	TLE4	PMID: 19448619 (EBI)	maternal	menopause_menstrual _onset
TLK1_ENSG00000198586	TLK1	PMID: 22267201 (EBI)	maternal	menopause_menstrual _onset
TMEM150B_ENSG00000180061	TMEM150B; TMEM224	PMID: 22267201 (EBI); PMID: 19448619 (EBI); PMID: 23307926 (EBI)	maternal	menopause_menstrual _onset
TNFRSF1A_ENSG00000067182	TNFRSF1A	PMID: 25549360	fetal	placental_abruption
TNFSF10_ENSG00000121858	TNFSF10	PMID: 23874842	meta-analysis/fetal	preeclampsia
TNF_ENSG00000232810	TNF	PMID: 27842992; PMID: 21429808 (EBI); PMID: 23316964	maternal/metaanalysis; candidate gene approach/maternal; fetal	miscarriage; preeclampsia
TREM1_ENSG00000124731	TREM1	PMID: 23874842	meta-analysis/fetal	preeclampsia

TRMT6_ENSG00000089195	TRMT6	PMID: 19448621 (EBI)	maternal	menopause_menstrual_onset
TTC39B_ENSG00000155158	TTC39B	PMID: 27453397	maternal	endometriosis_ovarian
TUNAR_ENSG00000250366	TUNAR	PMID: 28333195 (EBI)	maternal/deep ovarian and/or rectovaginal disease with dense adhesions	endometriosis_ovarian
UIMC1_ENSG00000087206	UIMC1	PMID: 19448621 (EBI); PMID: 22267201 (EBI)	maternal/age at menarche; maternal	menopause_menstrual_onset
VEGFA_ENSG00000112715	VEGFA ; VEGF ; VEGFA	PMID: 27842992; PMID: 16310040 ; PMID: 21429808 (EBI); PMID: 26010865; PMID: 23874842	maternal/metaanalysis; fetal; candidate gene approach/maternal; meta-analysis/fetal; regulator/target of susceptibility gene ided in 2014 paper/maternal	miscarriage; placenta_accreta; preeclampsia
VEZT_ENSG00000028203	VEZT	PMID: 23104006 (EBI); PMID: 28537267 (EBI); PMID: 23472165 (EBI) ; PMID: 24676469	maternal; maternal/endometriosis	endometriosis_ovarian
VIM_ENSG00000026025	VIM	PMID: 23874842	meta-analysis/fetal	preeclampsia
WNT4_ENSG00000162552	WNT4	PMID: 23472166 (EBI); PMID: 21151130 (EBI); PMID: 28333195 (EBI); PMID: 28537267 (EBI); PMID: 24676469; PMID: 23472165 (EBI) ; PMID: 28877031	maternal/deep ovarian and/or rectovaginal disease with dense adhesions; maternal; maternal/endometriosis; maternal/assoc. with gestational duration	endometriosis_ovarian; preterm_birth
WWTR1_ENSG00000018408	WWTR1	PMID: 23551011 (EBI)	maternal	preeclampsia
YKT6_ENSG00000106636	YKT6	PMID: 27680694	fetal	birth_weight
ZBTB40_ENSG00000184677	ZBTB40	PMID: 23472165 (EBI)	maternal/endometriosis	endometriosis_ovarian
ZBTB7A_ENSG00000178951	FBI1	PMID: 26093985	fetal/mrna expression	gtd_hydatidiform-mole
ZBTB7B_ENSG00000160685	ZBTB7B	PMID: 27680694	fetal	birth_weight
ZNF295-AS1_ENSG00000237232	ZNF295-AS1	PMID: 23551011 (EBI)	maternal	preeclampsia
ZNF300_ENSG00000145908	ZNF300	PMID: 27330572	fetal, methylation	fetal_growth_restriction
ZNRF3_ENSG00000183579	ZNRF3	PMID: 25549360	fetal	placental_abruption

(a) t-SNE plots show protein expression of dNK and ILC markers on live cells gated on CD45$^+$CD56$^+$CD14$^-$HLA-DR$^-$CD3$^-$ events from maternal decidua (Donors 2 and 10). **(b)** t-SNE plots showing protein expression of T cell markers on live cells gated on CD45$^+$CD3$^+$CD14$^-$HLA-DR$^-$CD56$^-$ events from Donor 3 maternal decidua (Donors 2 and 10).

Appendix 8 - Genes upregulated in maternal mononuclear phagocyte subsets relative to all other cell types at the maternal-fetal interface (log$_2$(fold-change) ≥ 0.5, adjusted p < 0.05):

Gene ID/Ensembl ID	p value	log2(fold change)	pct.1	pct.2	adjusted p value	cluster
APOC1_ENSG00000130208	0	3.474628312	0.984	0.396	0	pIMP
SPP1_ENSG00000118785	2.12E-212	2.939855199	0.954	0.404	5.32E-208	pIMP
APOE_ENSG00000130203	1.34E-210	2.565089336	0.961	0.618	3.37E-206	pIMP
FTL_ENSG00000087086	6.48E-256	2.403379017	1	0.994	1.63E-251	pIMP
FABP5_ENSG00000164687	2.89E-274	2.31287541	0.977	0.381	7.24E-270	pIMP
CTSD_ENSG00000117984	6.44E-246	1.982533089	0.995	0.789	1.61E-241	pIMP
CD68_ENSG00000129226	0	1.917236032	1	0.335	0	pIMP
TREM2_ENSG00000095970	0	1.883612334	0.961	0.108	0	pIMP
GCHFR_ENSG00000137880	0	1.844221269	0.88	0.166	0	pIMP
CSTB_ENSG00000160213	1.88E-231	1.807923324	0.998	0.76	4.72E-227	pIMP
GPNMB_ENSG00000136235	0	1.801323615	0.963	0.27	0	pIMP
CD9_ENSG00000010278	0	1.712729073	0.988	0.32	0	pIMP
GPX1_ENSG00000233276	1.51E-247	1.667258038	1	0.735	3.80E-243	pIMP
CTSB_ENSG00000164733	8.76E-232	1.648652025	0.993	0.687	2.20E-227	pIMP
PSAP_ENSG00000197746	4.53E-243	1.618523523	1	0.839	1.14E-238	pIMP
GRN_ENSG00000030582	8.92E-240	1.617299643	0.995	0.617	2.24E-235	pIMP
HLA-DRA_ENSG00000204287	5.39E-264	1.597306072	1	0.365	1.35E-259	pIMP
LYZ_ENSG00000090382	0	1.580091579	0.949	0.156	0	pIMP
SDS_ENSG00000135094	0	1.569110072	0.831	0.035	0	pIMP
LIPA_ENSG00000107798	2.09E-298	1.53167195	0.961	0.325	5.24E-294	pIMP
HLA-DPB1_ENSG00000223865	3.42E-276	1.484424551	0.998	0.324	8.58E-272	pIMP
ACP5_ENSG00000102575	4.35E-272	1.474577238	0.905	0.264	1.09E-267	pIMP
CD74_ENSG00000019582	7.12E-221	1.452318047	1	0.5	1.78E-216	pIMP
HLA-DPA1_ENSG00000231389	2.31E-288	1.421232223	0.995	0.3	5.81E-284	pIMP
HLA-DRB1_ENSG00000196126	0	1.42054236	0.995	0.244	0	pIMP
NPC2_ENSG00000119655	3.68E-229	1.388666837	1	0.761	9.24E-225	pIMP
HLA-DQB1_ENSG00000179344	0	1.372421009	0.963	0.165	0	pIMP
CYBA_ENSG00000051523	3.71E-221	1.372395588	1	0.651	9.32E-217	pIMP
CTSS_ENSG00000163131	1.95E-276	1.36278302	0.963	0.292	4.88E-272	pIMP
CHI3L1_ENSG00000133048	0	1.347135645	0.389	0.029	0	pIMP
IL1RN_ENSG00000136689	2.11E-241	1.3323977	0.465	0.063	5.28E-237	pIMP
CTSZ_ENSG00000101160	2.67E-289	1.328343999	0.963	0.311	6.70E-285	pIMP
S100A8_ENSG00000143546	0	1.323439766	0.766	0.07	0	pIMP
HLA-DMA_ENSG00000204257	0	1.311537574	0.933	0.18	0	pIMP
SPI1_ENSG00000066336	0	1.279694948	0.965	0.12	0	pIMP
PLAUR_ENSG00000011422	4.95E-248	1.272093049	0.94	0.321	1.24E-243	pIMP
C15orf48_ENSG00000166920	2.44E-285	1.259864305	0.894	0.209	6.13E-281	pIMP
HLA-DRB5_ENSG00000198502	0	1.255916102	0.998	0.19	0	pIMP
TYMP_ENSG00000025708	1.87E-227	1.255349313	0.977	0.445	4.70E-223	pIMP
LAPTM5_ENSG00000162511	9.35E-238	1.23825525	0.998	0.427	2.34E-233	pIMP
CAPG_ENSG00000042493	5.49E-206	1.228204723	0.995	0.474	1.38E-201	pIMP
ATP6V1F_ENSG00000128524	7.70E-226	1.225944363	0.998	0.7	1.93E-221	pIMP
S100A11_ENSG00000163191	8.02E-211	1.225921077	1	0.91	2.01E-206	pIMP
TSPO_ENSG00000100300	8.48E-227	1.211278564	0.993	0.589	2.13E-222	pIMP
FTH1_ENSG00000167996	7.55E-213	1.211201938	1	0.999	1.89E-208	pIMP
FBP1_ENSG00000165140	0	1.203672919	0.794	0.044	0	pIMP
HLA-DMB_ENSG00000242574	0	1.1890504	0.836	0.139	0	pIMP
HAMP_ENSG00000105697	0	1.185889254	0.653	0.044	0	pIMP
CD36_ENSG00000135218	0	1.167271163	0.829	0.089	0	pIMP
BRI3_ENSG00000164713	1.66E-237	1.156980145	0.984	0.451	4.17E-233	pIMP
ASAH1_ENSG00000104763	1.33E-206	1.144976798	0.988	0.52	3.34E-202	pIMP
LGMN_ENSG00000100600	1.15E-186	1.143711506	0.887	0.316	2.88E-182	pIMP

LTA4H_ENSG00000111144	2.49E-277	1.143042825	0.843	0.224	6.24E-273	pIMP
HLA-DQA1_ENSG00000196735	0	1.127538223	0.891	0.128	0	pIMP
OLR1_ENSG00000173391	0	1.11730615	0.926	0.149	0	pIMP
ITGB2_ENSG00000160255	9.01E-253	1.111725	0.979	0.294	2.26E-248	pIMP
LINC01272_ENSG00000224397	0	1.098740184	0.766	0.03	0	pIMP
CYP27A1_ENSG00000135929	0	1.087753219	0.734	0.048	0	pIMP
IFI30_ENSG00000216490	0	1.078619593	0.87	0.072	0	pIMP
VIM_ENSG00000026025	1.33E-142	1.055035923	1	0.821	3.34E-138	pIMP
HMOX1_ENSG00000100292	0	1.052134008	0.926	0.184	0	pIMP
SGK1_ENSG00000118515	6.11E-267	1.049580569	0.921	0.244	1.53E-262	pIMP
GSTO1_ENSG00000148834	4.23E-191	1.047374942	0.975	0.562	1.06E-186	pIMP
TYROBP_ENSG00000011600	2.88E-172	1.043126007	1	0.501	7.23E-168	pIMP
S100A10_ENSG00000197747	6.65E-162	1.032044056	1	0.517	1.67E-157	pIMP
LGALS3_ENSG00000131981	2.62E-132	1.028114848	0.984	0.61	6.56E-128	pIMP
PLD3_ENSG00000105223	1.52E-114	1.026271203	0.896	0.539	3.81E-110	pIMP
MS4A7_ENSG00000166927	0	1.026230796	0.928	0.111	0	pIMP
AIF1_ENSG00000204472	2.69E-303	1.018541371	0.986	0.229	6.75E-299	pIMP
S100A9_ENSG00000163220	0	1.010621421	0.88	0.2	0	pIMP
NCF2_ENSG00000116701	0	0.99913223	0.796	0.044	0	pIMP
LPL_ENSG00000175445	0	0.998594886	0.641	0.022	0	pIMP
ATP6V0B_ENSG00000117410	5.40E-182	0.994190143	0.984	0.634	1.36E-177	pIMP
CXCL16_ENSG00000161921	0	0.993395831	0.873	0.124	0	pIMP
HLA-DQA2_ENSG00000237541	0	0.984065959	0.843	0.097	0	pIMP
MSR1_ENSG00000038945	0	0.96032345	0.748	0.073	0	pIMP
SERPINA1_ENSG00000197249	0	0.952198443	0.831	0.076	0	pIMP
DBI_ENSG00000155368	6.11E-167	0.934957247	0.986	0.743	1.53E-162	pIMP
SLC7A7_ENSG00000155465	0	0.930056105	0.824	0.074	0	pIMP
PLA2G7_ENSG00000146070	2.42E-183	0.926454483	0.669	0.17	6.06E-179	pIMP
SH3BGRL3_ENSG00000142669	6.15E-126	0.917158193	1	0.905	1.54E-121	pIMP
LILRB4_ENSG00000186818	0	0.902156865	0.787	0.053	0	pIMP
SLC11A1_ENSG00000018280	0	0.902010684	0.766	0.062	0	pIMP
PRDX1_ENSG00000117450	2.85E-149	0.894965201	0.991	0.642	7.16E-145	pIMP
C1orf162_ENSG00000143110	2.89E-284	0.887552703	0.905	0.191	7.24E-280	pIMP
ATP6V0D1_ENSG00000159720	8.07E-162	0.884479615	0.912	0.437	2.02E-157	pIMP
MNDA_ENSG00000163563	0	0.87684512	0.794	0.073	0	pIMP
PDXK_ENSG00000160209	5.33E-279	0.874387038	0.81	0.185	1.34E-274	pIMP
LY96_ENSG00000154589	0	0.865143976	0.907	0.151	0	pIMP
MMP9_ENSG00000100985	0	0.856529741	0.292	0.019	0	pIMP
LST1_ENSG00000204482	0	0.851932896	0.914	0.147	0	pIMP
MAFB_ENSG00000204103	0	0.846339285	0.896	0.173	0	pIMP
CTSH_ENSG00000103811	6.25E-179	0.83996661	0.91	0.328	1.57E-174	pIMP
C5AR1_ENSG00000197405	0	0.838940696	0.794	0.076	0	pIMP
PPT1_ENSG00000131238	7.04E-172	0.838383906	0.903	0.367	1.77E-167	pIMP
ALOX5AP_ENSG00000132965	1.17E-138	0.832886959	0.78	0.248	2.93E-134	pIMP
LAIR1_ENSG00000167613	0	0.817988356	0.845	0.098	0	pIMP
GLUL_ENSG00000135821	5.49E-133	0.816288599	0.984	0.644	1.38E-128	pIMP
LY86_ENSG00000112799	0	0.808852694	0.796	0.088	0	pIMP
CSTA_ENSG00000121552	0	0.808774673	0.766	0.11	0	pIMP
DNASE2_ENSG00000105612	6.16E-164	0.796724422	0.812	0.283	1.55E-159	pIMP
FCGRT_ENSG00000104870	1.75E-158	0.795943565	0.975	0.498	4.38E-154	pIMP
H2AFY_ENSG00000113648	5.18E-148	0.794733463	0.951	0.535	1.30E-143	pIMP
VAMP8_ENSG00000118640	1.35E-140	0.788005618	0.988	0.546	3.39E-136	pIMP
SYNGR2_ENSG00000108639	7.63E-184	0.786549682	0.924	0.324	1.91E-179	pIMP
AP2S1_ENSG00000042753	3.00E-141	0.781619189	0.979	0.657	7.53E-137	pIMP
ALDH2_ENSG00000111275	1.80E-165	0.774030651	0.725	0.218	4.51E-161	pIMP
FCGR3A_ENSG00000203747	0	0.771741109	0.824	0.112	0	pIMP
CCL2_ENSG00000108691	1.06E-14	0.76718962	0.299	0.163	2.66E-10	pIMP
IL4I1_ENSG00000104951	0	0.761747886	0.593	0.034	0	pIMP
ARPC1B_ENSG00000130429	1.97E-137	0.759918922	0.991	0.745	4.95E-133	pIMP
BLVRB_ENSG00000090013	3.05E-170	0.756715535	0.933	0.403	7.65E-166	pIMP

LSP1_ENSG00000130592	2.14E-120	0.750117631	0.981	0.513	5.38E-116	pIMP
ANXA2_ENSG00000182718	4.11E-110	0.747528151	0.998	0.81	1.03E-105	pIMP
CPM_ENSG00000135678	0	0.744760299	0.664	0.095	0	pIMP
PYCARD_ENSG00000103490	2.54E-161	0.743057271	0.889	0.308	6.36E-157	pIMP
UCP2_ENSG00000175567	1.72E-190	0.742283313	0.877	0.242	4.32E-186	pIMP
MS4A6A_ENSG00000110077	5.72E-212	0.739019454	0.694	0.14	1.44E-207	pIMP
PLXDC2_ENSG00000120594	0	0.736168944	0.773	0.088	0	pIMP
OAZ1_ENSG00000104904	3.76E-185	0.73561062	1	0.958	9.43E-181	pIMP
SMCO4_ENSG00000166002	0	0.73410519	0.757	0.103	0	pIMP
RNF130_ENSG00000113269	7.30E-156	0.733048997	0.921	0.377	1.83E-151	pIMP
CREG1_ENSG00000143162	2.76E-192	0.731282877	0.866	0.274	6.92E-188	pIMP
ATP6V1B2_ENSG00000147416	2.94E-175	0.729455165	0.794	0.257	7.38E-171	pIMP
NOP10_ENSG00000182117	6.57E-121	0.727320533	0.984	0.721	1.65E-116	pIMP
PLIN2_ENSG00000147872	3.32E-105	0.720558476	0.912	0.484	8.32E-101	pIMP
CHCHD10_ENSG00000250479	1.23E-113	0.720390944	0.919	0.497	3.08E-109	pIMP
RETN_ENSG00000104918	0	0.719237022	0.37	0.026	0	pIMP
RNASET2_ENSG00000026297	1.59E-166	0.717280917	0.928	0.334	3.98E-162	pIMP
SAT1_ENSG00000130066	1.49E-106	0.711347248	1	0.85	3.73E-102	pIMP
NPL_ENSG00000135838	0	0.708675357	0.799	0.126	0	pIMP
RP11-1143G9.4_ENSG00000257764	0	0.707840228	0.53	0.055	0	pIMP
MARCO_ENSG00000019169	0	0.703958701	0.539	0.019	0	pIMP
FN1_ENSG00000115414	1.57E-127	0.703632729	0.861	0.365	3.94E-123	pIMP
TGFBI_ENSG00000120708	8.82E-155	0.700749958	0.852	0.291	2.21E-150	pIMP
BCL2A1_ENSG00000140379	0	0.700008122	0.66	0.095	0	pIMP
SDSL_ENSG00000139410	0	0.695424634	0.708	0.103	0	pIMP
LIMS1_ENSG00000169756	5.40E-125	0.693831734	0.868	0.386	1.35E-120	pIMP
SQRDL_ENSG00000137767	4.36E-266	0.691716526	0.789	0.166	1.09E-261	pIMP
LGALS9_ENSG00000168961	5.53E-177	0.6867502	0.898	0.291	1.39E-172	pIMP
CCL18_ENSG00000275385	0	0.679249888	0.257	0.007	0	pIMP
YBX1_ENSG00000065978	5.02E-120	0.677861199	1	0.908	1.26E-115	pIMP
FAM195A_ENSG00000172366	8.18E-222	0.666987108	0.764	0.184	2.05E-217	pIMP
FUOM_ENSG00000148803	0	0.666220708	0.734	0.096	0	pIMP
ATOX1_ENSG00000177556	1.01E-109	0.665648586	0.942	0.569	2.53E-105	pIMP
MFSD1_ENSG00000118855	5.48E-191	0.663584794	0.838	0.251	1.38E-186	pIMP
CPVL_ENSG00000106066	1.90E-188	0.661502258	0.743	0.183	4.76E-184	pIMP
MMP7_ENSG00000137673	1.96E-265	0.659295463	0.176	0.008	4.91E-261	pIMP
FCGR1A_ENSG00000150337	0	0.655209102	0.63	0.065	0	pIMP
CCDC88A_ENSG00000115355	0	0.650865834	0.715	0.121	0	pIMP
HEXB_ENSG00000049860	4.07E-134	0.648908959	0.931	0.428	1.02E-129	pIMP
PKM_ENSG00000067225	6.94E-92	0.647726875	0.968	0.688	1.74E-87	pIMP
AKR1A1_ENSG00000117448	1.33E-120	0.647113102	0.868	0.426	3.34E-116	pIMP
CD52_ENSG00000169442	1.19E-97	0.643645036	0.903	0.386	2.99E-93	pIMP
CTSL_ENSG00000135047	1.47E-93	0.641274183	0.961	0.563	3.69E-89	pIMP
GPX4_ENSG00000167468	1.68E-117	0.640113125	1	0.808	4.22E-113	pIMP
HMGA1_ENSG00000137309	9.56E-158	0.636357612	0.854	0.26	2.40E-153	pIMP
FABP4_ENSG00000170323	7.74E-192	0.632838531	0.204	0.015	1.94E-187	pIMP
IGSF6_ENSG00000140749	0	0.630600046	0.588	0.073	0	pIMP
SAMHD1_ENSG00000101347	7.36E-237	0.629483526	0.81	0.175	1.85E-232	pIMP
SCARB2_ENSG00000138760	4.55E-137	0.627015377	0.764	0.276	1.14E-132	pIMP
ALCAM_ENSG00000170017	0	0.625966933	0.609	0.05	0	pIMP
MS4A4A_ENSG00000110079	0	0.62540035	0.75	0.093	0	pIMP
LACTB_ENSG00000103642	9.92E-256	0.625286011	0.729	0.151	2.49E-251	pIMP
RMDN3_ENSG00000137824	7.65E-146	0.624688555	0.637	0.187	1.92E-141	pIMP
RGS10_ENSG00000148908	9.23E-139	0.620102937	0.887	0.344	2.32E-134	pIMP
ARRB2_ENSG00000141480	2.88E-223	0.615539453	0.831	0.19	7.23E-219	pIMP
MPP1_ENSG00000130830	1.84E-197	0.612624874	0.806	0.205	4.62E-193	pIMP
RNASE6_ENSG00000169413	2.10E-272	0.609210663	0.692	0.111	5.27E-268	pIMP
SNX10_ENSG00000086300	1.06E-112	0.606464559	0.785	0.315	2.67E-108	pIMP
APOC2_ENSG00000234906	1.00E-149	0.603627611	0.273	0.035	2.52E-145	pIMP
ARPC3_ENSG00000111229	2.14E-125	0.592200846	0.995	0.874	5.37E-121	pIMP

ADAP2_ENSG00000184060	0	0.589555015	0.734	0.097	0	pIMP
YWHAH_ENSG00000128245	1.90E-95	0.587725648	0.919	0.515	4.76E-91	pIMP
CECR1_ENSG00000093072	0	0.584657904	0.639	0.087	0	pIMP
RENBP_ENSG00000102032	0	0.578296373	0.66	0.059	0	pIMP
HN1_ENSG00000189159	3.87E-93	0.577760774	0.894	0.46	9.70E-89	pIMP
CLEC7A_ENSG00000172243	0	0.577137875	0.669	0.088	0	pIMP
GRB2_ENSG00000177885	3.94E-117	0.572195322	0.873	0.382	9.88E-113	pIMP
SLC16A3_ENSG00000141526	2.03E-125	0.570760248	0.907	0.365	5.08E-121	pIMP
TNFSF13B_ENSG00000102524	0	0.567061445	0.66	0.072	0	pIMP
TM4SF19_ENSG00000145107	0	0.562945196	0.324	0.002	0	pIMP
EMP3_ENSG00000142227	2.34E-46	0.561293743	0.949	0.664	5.87E-42	pIMP
FCER1G_ENSG00000158869	7.71E-71	0.560220414	0.995	0.484	1.93E-66	pIMP
ST14_ENSG00000149418	0	0.558284987	0.625	0.062	0	pIMP
FPR3_ENSG00000187474	0	0.557333095	0.616	0.049	0	pIMP
PLEK_ENSG00000115956	7.36E-203	0.551065352	0.773	0.165	1.85E-198	pIMP
S100A4_ENSG00000196154	4.78E-53	0.548376759	0.995	0.835	1.20E-48	pIMP
SLC25A5_ENSG00000005022	5.54E-83	0.544908603	0.961	0.695	1.39E-78	pIMP
HM13_ENSG00000101294	5.44E-71	0.542144484	0.85	0.504	1.36E-66	pIMP
FERMT3_ENSG00000149781	3.77E-164	0.540564859	0.769	0.205	9.46E-160	pIMP
GM2A_ENSG00000196743	9.64E-202	0.539444417	0.623	0.126	2.42E-197	pIMP
CD84_ENSG00000066294	0	0.534237836	0.625	0.045	0	pIMP
DNPH1_ENSG00000112667	8.74E-93	0.533456155	0.766	0.348	2.19E-88	pIMP
TWF2_ENSG00000247596	5.49E-117	0.5317722	0.812	0.326	1.38E-112	pIMP
CD81_ENSG00000110651	9.15E-92	0.52863427	0.852	0.403	2.29E-87	pIMP
EFHD2_ENSG00000142634	1.94E-127	0.528603887	0.789	0.272	4.87E-123	pIMP
MGLL_ENSG00000074416	6.33E-98	0.526829372	0.593	0.2	1.59E-93	pIMP
FAM96A_ENSG00000166797	6.09E-110	0.52364128	0.831	0.353	1.53E-105	pIMP
M6PR_ENSG00000003056	1.27E-101	0.519737428	0.815	0.36	3.19E-97	pIMP
SDCBP_ENSG00000137575	2.21E-63	0.519150865	0.988	0.726	5.55E-59	pIMP
SLC15A3_ENSG00000110446	0	0.517781822	0.62	0.062	0	pIMP
OTOA_ENSG00000155719	0	0.512771923	0.475	0.025	0	pIMP
ME2_ENSG00000082212	1.71E-169	0.511348929	0.65	0.159	4.28E-165	pIMP
NUP214_ENSG00000126883	2.19E-194	0.511287301	0.549	0.104	5.49E-190	pIMP
ATF5_ENSG00000169136	2.35E-179	0.509709794	0.583	0.123	5.89E-175	pIMP
HNMT_ENSG00000150540	2.29E-116	0.509051201	0.826	0.33	5.74E-112	pIMP
USF2_ENSG00000105698	1.59E-161	0.508879795	0.741	0.21	3.98E-157	pIMP
RGS2_ENSG00000116741	3.96E-65	0.506986741	0.762	0.363	9.92E-61	pIMP
MARCKS_ENSG00000277443	4.36E-85	0.505558929	0.859	0.402	1.09E-80	pIMP
CD63_ENSG00000135404	2.28E-78	0.504503952	1	0.959	5.71E-74	pIMP
IL18_ENSG00000150782	0	0.504234032	0.6	0.078	0	pIMP
C3AR1_ENSG00000171860	0	0.503990903	0.632	0.073	0	pIMP
CST6_ENSG00000175315	3.30E-247	0.503627039	0.41	0.047	8.27E-243	pIMP
CORO1C_ENSG00000110880	1.49E-117	0.501988536	0.743	0.274	3.75E-113	pIMP
GNB4_ENSG00000114450	5.43E-242	0.501841489	0.664	0.124	1.36E-237	pIMP
BLOC1S1_ENSG00000135441	5.92E-80	0.501035537	0.938	0.622	1.48E-75	pIMP
C1QA_ENSG00000173372	0	3.24151265	0.999	0.227	0	dMP2
C1QC_ENSG00000159189	0	3.16302791	1	0.157	0	dMP2
C1QB_ENSG00000173369	0	3.15122934	1	0.198	0	dMP2
RNASE1_ENSG00000129538	0	3.024758896	0.982	0.29	0	dMP2
CD74_ENSG00000019582	0	2.774901599	1	0.478	0	dMP2
CD14_ENSG00000170458	0	2.639914304	0.976	0.168	0	dMP2
HLA-DRB5_ENSG00000198502	0	2.478885991	0.973	0.155	0	dMP2
HLA-DRA_ENSG00000204287	0	2.462895081	0.997	0.337	0	dMP2
AIF1_ENSG00000204472	0	2.461597705	0.995	0.195	0	dMP2
FOLR2_ENSG00000165457	0	2.313737909	0.927	0.084	0	dMP2
HLA-DPA1_ENSG00000231389	0	2.245462909	0.981	0.27	0	dMP2
MS4A6A_ENSG00000110077	0	2.239257868	0.94	0.101	0	dMP2
SEPP1_ENSG00000250722	0	2.175239076	0.943	0.551	0	dMP2
HLA-DRB1_ENSG00000196126	0	2.151967145	0.977	0.212	0	dMP2
HLA-DPB1_ENSG00000223865	0	2.08620883	0.979	0.295	0	dMP2

HSPA1A_ENSG00000204389	0	2.026854323	0.937	0.405	0	dMP2
MS4A7_ENSG00000166927	0	1.868642506	0.815	0.081	0	dMP2
STAB1_ENSG00000010327	0	1.864780156	0.789	0.086	0	dMP2
CCL4L2_ENSG00000276070	0	1.814583551	0.778	0.231	0	dMP2
CCL3L3_ENSG00000276085	0	1.802098806	0.818	0.175	0	dMP2
CYBA_ENSG00000051523	0	1.727117843	0.992	0.635	0	dMP2
HSPA1B_ENSG00000204388	0	1.708641748	0.884	0.374	0	dMP2
HLA-DMA_ENSG00000204257	0	1.701953421	0.821	0.153	0	dMP2
HLA-DQB1_ENSG00000179344	0	1.687763028	0.82	0.137	0	dMP2
CCL2_ENSG00000108691	0	1.684438364	0.497	0.145	0	dMP2
MS4A4A_ENSG00000110079	0	1.662923116	0.721	0.065	0	dMP2
HLA-DQA1_ENSG00000196735	0	1.659157951	0.779	0.1	0	dMP2
CSF1R_ENSG00000182578	0	1.647267235	0.759	0.1	0	dMP2
TREM2_ENSG00000095970	0	1.631193757	0.733	0.083	0	dMP2
FCGRT_ENSG00000104870	0	1.61069762	0.933	0.479	0	dMP2
TMEM176B_ENSG00000106565	0	1.609488848	0.735	0.148	0	dMP2
HLA-DQA2_ENSG00000237541	0	1.596957663	0.708	0.072	0	dMP2
GPR34_ENSG00000171659	0	1.592747648	0.688	0.068	0	dMP2
VSIG4_ENSG00000155659	0	1.585974556	0.676	0.064	0	dMP2
CYBB_ENSG00000165168	0	1.567105889	0.683	0.062	0	dMP2
MAFB_ENSG00000204103	0	1.556650205	0.672	0.153	0	dMP2
NPC2_ENSG00000119655	0	1.554515798	0.992	0.75	0	dMP2
MAF_ENSG00000178573	0	1.534114627	0.74	0.215	0	dMP2
RNASE6_ENSG00000169413	0	1.52733585	0.71	0.084	0	dMP2
FCGR2A_ENSG00000143226	0	1.506355817	0.69	0.082	0	dMP2
RGS10_ENSG00000148908	0	1.503666495	0.815	0.324	0	dMP2
F13A1_ENSG00000124491	0	1.502400748	0.627	0.045	0	dMP2
LY96_ENSG00000154589	0	1.471365902	0.726	0.128	0	dMP2
FCGR3A_ENSG00000203747	0	1.456955285	0.678	0.088	0	dMP2
HLA-DMB_ENSG00000242574	0	1.455485848	0.69	0.117	0	dMP2
LPAR6_ENSG00000139679	0	1.450111931	0.652	0.136	0	dMP2
FTL_ENSG00000087086	0	1.444380814	1	0.993	0	dMP2
CD68_ENSG00000129226	0	1.433221481	0.875	0.312	0	dMP2
SPI1_ENSG00000066336	0	1.402776339	0.711	0.097	0	dMP2
CTSZ_ENSG00000101160	0	1.379740803	0.755	0.293	0	dMP2
GPX1_ENSG00000233276	0	1.370685891	0.987	0.724	0	dMP2
SLCO2B1_ENSG00000137491	0	1.366055173	0.596	0.046	0	dMP2
HAMP_ENSG00000105697	0	1.360471319	0.369	0.033	0	dMP2
LGMN_ENSG00000100600	0	1.356240915	0.71	0.301	0	dMP2
LST1_ENSG00000204482	0	1.341760985	0.718	0.124	0	dMP2
IGSF6_ENSG00000140749	0	1.33835922	0.559	0.052	0	dMP2
PSAP_ENSG00000197746	0	1.329246709	0.992	0.832	0	dMP2
MARCKS_ENSG00000277443	0	1.308048006	0.831	0.383	0	dMP2
A2M_ENSG00000175899	0	1.261791599	0.727	0.229	0	dMP2
KLF2_ENSG00000127528	0	1.257693101	0.602	0.164	0	dMP2
RB1_ENSG00000139687	0	1.256292178	0.586	0.131	0	dMP2
SLC40A1_ENSG00000138449	0	1.247907878	0.769	0.332	0	dMP2
DAB2_ENSG00000153071	0	1.245095046	0.757	0.337	0	dMP2
RNASET2_ENSG00000026297	0	1.235965292	0.75	0.318	0	dMP2
TYROBP_ENSG00000011600	0	1.228587651	0.998	0.478	0	dMP2
PLTP_ENSG00000100979	0	1.220549775	0.578	0.275	0	dMP2
KLF6_ENSG00000067082	0	1.193046758	0.954	0.797	0	dMP2
ADAP2_ENSG00000184060	0	1.187896229	0.535	0.08	0	dMP2
CCL3_ENSG00000277632	0	1.185471226	0.972	0.437	0	dMP2
KCTD12_ENSG00000178695	0	1.182279528	0.588	0.156	0	dMP2
IER5_ENSG00000162783	0	1.177337246	0.584	0.255	0	dMP2
FCGR1A_ENSG00000150337	0	1.160483507	0.5	0.047	0	dMP2
MSR1_ENSG00000038945	0	1.157266276	0.507	0.056	0	dMP2
C3_ENSG00000125730	0	1.155237335	0.611	0.261	0	dMP2
MEF2C_ENSG00000081189	0	1.151767001	0.579	0.128	0	dMP2

LY86_ENSG00000112799	0	1.150726095	0.527	0.072	0	dMP2
CST3_ENSG00000101439	0	1.148610099	1	0.825	0	dMP2
CD163_ENSG00000177575	0	1.139050802	0.504	0.054	0	dMP2
HPGDS_ENSG00000163106	0	1.133056661	0.491	0.035	0	dMP2
SGK1_ENSG00000118515	0	1.125083022	0.609	0.231	0	dMP2
NINJ1_ENSG00000131669	0	1.103647438	0.649	0.319	0	dMP2
MRC1_ENSG00000260314	0	1.082199082	0.446	0.039	0	dMP2
OTUD1_ENSG00000165312	0	1.068607659	0.444	0.121	0	dMP2
ALOX5AP_ENSG00000132965	0	1.059342743	0.668	0.231	0	dMP2
RUNX1_ENSG00000159216	0	1.057344415	0.498	0.126	0	dMP2
DUSP6_ENSG00000139318	0	1.047258488	0.47	0.163	0	dMP2
CD4_ENSG00000010610	0	1.039312676	0.486	0.079	0	dMP2
FCER1G_ENSG00000158869	0	1.026398258	0.993	0.462	0	dMP2
LTC4S_ENSG00000213316	0	1.016681163	0.45	0.083	0	dMP2
CTSS_ENSG00000163131	0	1.015752761	0.703	0.277	0	dMP2
ZFP36L1_ENSG00000185650	0	1.014858663	0.924	0.712	0	dMP2
TMEM176A_ENSG00000002933	0	1.008580114	0.472	0.112	0	dMP2
CD81_ENSG00000110651	0	1.004484594	0.653	0.394	0	dMP2
HMOX1_ENSG00000100292	0	1.003708633	0.528	0.174	0	dMP2
PYCARD_ENSG00000103490	0	0.999991265	0.647	0.295	0	dMP2
FCGBP_ENSG00000275395	0	0.999512877	0.265	0.023	0	dMP2
GRN_ENSG00000030582	0	0.992205505	0.857	0.608	0	dMP2
MNDA_ENSG00000163563	0	0.99166856	0.45	0.06	0	dMP2
YWHAH_ENSG00000128245	5.25E-288	0.98716314	0.697	0.51	1.32E-283	dMP2
C3AR1_ENSG00000171860	0	0.984153447	0.43	0.06	0	dMP2
LAPTM5_ENSG00000162511	0	0.980401364	0.888	0.408	0	dMP2
TTYH3_ENSG00000136295	0	0.960785577	0.417	0.088	0	dMP2
GAL3ST4_ENSG00000197093	0	0.957893008	0.378	0.034	0	dMP2
MPEG1_ENSG00000197629	0	0.956547891	0.405	0.041	0	dMP2
SAT1_ENSG00000130066	0	0.955920327	0.986	0.844	0	dMP2
MFSD1_ENSG00000118855	0	0.949551206	0.536	0.242	0	dMP2
CTSB_ENSG00000164733	0	0.948535424	0.907	0.678	0	dMP2
CD93_ENSG00000125810	0	0.935398686	0.391	0.058	0	dMP2
AP1B1_ENSG00000100280	0	0.928367467	0.465	0.153	0	dMP2
IER3_ENSG00000137331	0	0.914921396	0.761	0.433	0	dMP2
GADD45B_ENSG00000099860	0	0.912732719	0.872	0.704	0	dMP2
GPR183_ENSG00000169508	0	0.908626629	0.577	0.154	0	dMP2
RHOB_ENSG00000143878	2.27E-297	0.902680734	0.819	0.665	5.70E-293	dMP2
CLEC7A_ENSG00000172243	0	0.897493185	0.412	0.077	0	dMP2
TBXAS1_ENSG00000059377	0	0.878922367	0.399	0.057	0	dMP2
FAM26F_ENSG00000188820	0	0.872282539	0.382	0.082	0	dMP2
NEAT1_ENSG00000245532	0	0.866730208	0.953	0.857	0	dMP2
CX3CR1_ENSG00000168329	0	0.860116566	0.297	0.007	0	dMP2
HSPA6_ENSG00000173110	5.29E-288	0.85878606	0.241	0.049	1.33E-283	dMP2
PLAU_ENSG00000122861	1.52E-171	0.854270722	0.402	0.2	3.81E-167	dMP2
BIN1_ENSG00000136717	1.16E-173	0.85234764	0.492	0.301	2.90E-169	dMP2
BMP2K_ENSG00000138756	0	0.848054395	0.381	0.077	0	dMP2
NCF4_ENSG00000100365	0	0.841491973	0.385	0.069	0	dMP2
VMP1_ENSG00000062716	4.84E-156	0.838477022	0.612	0.511	1.21E-151	dMP2
MGAT4A_ENSG00000071073	0	0.837753561	0.446	0.154	0	dMP2
VAMP8_ENSG00000118640	0	0.837473865	0.88	0.532	0	dMP2
HNMT_ENSG00000150540	1.91E-199	0.834998024	0.526	0.325	4.80E-195	dMP2
C6orf62_ENSG00000112308	1.11E-171	0.830661381	0.556	0.398	2.78E-167	dMP2
P2RY13_ENSG00000181631	0	0.828286875	0.278	0.01	0	dMP2
TYMP_ENSG00000025708	3.07E-232	0.825040907	0.646	0.44	7.71E-228	dMP2
PLXDC2_ENSG00000120594	0	0.821551031	0.37	0.08	0	dMP2
LAIR1_ENSG00000167613	0	0.8206194	0.401	0.089	0	dMP2
GAS6_ENSG00000183087	5.42E-198	0.816383293	0.475	0.255	1.36E-193	dMP2
CD83_ENSG00000112149	0	0.812460456	0.479	0.175	0	dMP2
MARCH1_ENSG00000145416	0	0.810977328	0.341	0.036	0	dMP2

RASSF4_ENSG00000107551	0	0.799724155	0.374	0.086	0	dMP2
FPR3_ENSG00000187474	0	0.798209543	0.344	0.039	0	dMP2
CXCL16_ENSG00000161921	0	0.793763487	0.407	0.117	0	dMP2
RGS2_ENSG00000116741	2.79E-164	0.78909855	0.56	0.357	7.00E-160	dMP2
C1orf54_ENSG00000118292	6.51E-275	0.788451684	0.404	0.147	1.63E-270	dMP2
CTSD_ENSG00000117984	0	0.785839995	0.903	0.785	0	dMP2
LILRB4_ENSG00000186818	0	0.784299388	0.352	0.045	0	dMP2
GATM_ENSG00000171766	0	0.781990352	0.325	0.034	0	dMP2
ATP6V0B_ENSG00000117410	7.57E-268	0.777074491	0.745	0.632	1.90E-263	dMP2
SIGLEC1_ENSG00000088827	0	0.768198109	0.304	0.037	0	dMP2
SPRED1_ENSG00000166068	0	0.764179708	0.315	0.058	0	dMP2
C5AR1_ENSG00000197405	0	0.763414895	0.368	0.068	0	dMP2
RAP2B_ENSG00000181467	2.62E-189	0.754346066	0.393	0.18	6.58E-185	dMP2
OLFML3_ENSG00000116774	1.01E-165	0.753971913	0.522	0.315	2.53E-161	dMP2
NAIP_ENSG00000249437	0	0.751599518	0.317	0.049	0	dMP2
FCGR1B_ENSG00000198019	0	0.749934807	0.294	0.019	0	dMP2
CTSH_ENSG00000103811	2.27E-182	0.749051993	0.525	0.324	5.69E-178	dMP2
ARRB2_ENSG00000141480	2.47E-277	0.746516821	0.46	0.182	6.19E-273	dMP2
TRA2B_ENSG00000136527	1.94E-169	0.741036991	0.697	0.645	4.85E-165	dMP2
CD302_ENSG00000241399	1.58E-161	0.729547347	0.356	0.166	3.96E-157	dMP2
OGFRL1_ENSG00000119900	9.51E-297	0.726063241	0.34	0.099	2.38E-292	dMP2
CD86_ENSG00000114013	0	0.724698189	0.331	0.055	0	dMP2
RP11-386I14.4_ENSG00000273338	3.13E-188	0.723423005	0.399	0.173	7.85E-184	dMP2
KLF4_ENSG00000136826	2.33E-179	0.722976299	0.663	0.459	5.83E-175	dMP2
ASAH1_ENSG00000104763	1.56E-146	0.72218963	0.624	0.52	3.90E-142	dMP2
HSPH1_ENSG00000120694	2.69E-79	0.718710281	0.372	0.251	6.75E-75	dMP2
CREG1_ENSG00000143162	1.34E-139	0.717318742	0.448	0.271	3.37E-135	dMP2
HCK_ENSG00000101336	0	0.716943623	0.32	0.048	0	dMP2
RGS1_ENSG00000090104	0	0.715795005	0.891	0.399	0	dMP2
BST2_ENSG00000130303	1.72E-277	0.715190497	0.79	0.508	4.32E-273	dMP2
ARHGAP18_ENSG00000146376	2.56E-205	0.715081329	0.406	0.179	6.42E-201	dMP2
DNAJB1_ENSG00000132002	2.63E-128	0.713487407	0.623	0.53	6.60E-124	dMP2
GYPC_ENSG00000136732	2.53E-152	0.713389585	0.627	0.498	6.34E-148	dMP2
FGL2_ENSG00000127951	0	0.712821403	0.353	0.077	0	dMP2
GMFG_ENSG00000130755	2.05E-273	0.710391817	0.68	0.363	5.14E-269	dMP2
CAPZB_ENSG00000077549	2.95E-280	0.709356164	0.807	0.758	7.39E-276	dMP2
GNAI2_ENSG00000114353	9.93E-160	0.705834138	0.591	0.447	2.49E-155	dMP2
CXCL8_ENSG00000169429	0	0.704690927	0.657	0.295	0	dMP2
PHACTR1_ENSG00000112137	0	0.704597009	0.299	0.069	0	dMP2
ITM2B_ENSG00000136156	0	0.702753237	0.992	0.964	0	dMP2
CH17-373J23.1_ENSG00000276216	2.75E-190	0.701110904	0.317	0.114	6.89E-186	dMP2
CNPY3_ENSG00000137161	3.04E-131	0.70054867	0.508	0.371	7.62E-127	dMP2
C4orf48_ENSG00000243449	2.04E-156	0.700458344	0.566	0.409	5.12E-152	dMP2
CLECL1_ENSG00000184293	0	0.691824927	0.274	0.023	0	dMP2
RP11-480C22.1_ENSG00000273409	0	0.690891638	0.227	0.003	0	dMP2
ITGB2_ENSG00000160255	1.08E-291	0.68905848	0.637	0.283	2.70E-287	dMP2
GIMAP4_ENSG00000133574	6.85E-245	0.684972273	0.39	0.138	1.72E-240	dMP2
PLEK_ENSG00000115956	2.10E-240	0.683245654	0.419	0.158	5.27E-236	dMP2
MGST2_ENSG00000085871	5.96E-173	0.68105625	0.487	0.278	1.49E-168	dMP2
LGALS9_ENSG00000168961	6.95E-171	0.676769563	0.496	0.286	1.74E-166	dMP2
TNFSF13B_ENSG00000102524	0	0.675811204	0.326	0.065	0	dMP2
IFI30_ENSG00000216490	2.83E-303	0.665606858	0.294	0.069	7.10E-299	dMP2
C2_ENSG00000166278	1.07E-115	0.661353302	0.348	0.188	2.67E-111	dMP2
MTSS1_ENSG00000170873	3.17E-275	0.659441282	0.265	0.064	7.94E-271	dMP2
PPT1_ENSG00000131238	1.71E-92	0.659422233	0.468	0.368	4.29E-88	dMP2
FRMD4B_ENSG00000114541	1.54E-204	0.658444057	0.351	0.134	3.86E-200	dMP2
BRI3_ENSG00000164713	7.66E-138	0.658388996	0.578	0.45	1.92E-133	dMP2
CYTH4_ENSG00000100055	1.23E-230	0.657047456	0.391	0.145	3.08E-226	dMP2
NRP1_ENSG00000099250	5.04E-89	0.647001647	0.386	0.255	1.26E-84	dMP2
SYNGR2_ENSG00000108639	2.47E-137	0.64199751	0.497	0.321	6.20E-133	dMP2

QKI_ENSG00000112531	3.16E-93	0.64161907	0.383	0.25	7.92E-89	dMP2
CYFIP1_ENSG00000273749	1.33E-95	0.639560502	0.319	0.18	3.34E-91	dMP2
ZEB2_ENSG00000169554	7.26E-139	0.638107879	0.444	0.253	1.82E-134	dMP2
SAMHD1_ENSG00000101347	3.04E-159	0.633404568	0.372	0.172	7.62E-155	dMP2
CSF2RA_ENSG00000198223	1.28E-183	0.631553282	0.393	0.168	3.20E-179	dMP2
NCKAP1L_ENSG00000123338	5.69E-241	0.618829289	0.338	0.109	1.43E-236	dMP2
SPATS2L_ENSG00000196141	2.19E-70	0.615804213	0.412	0.314	5.48E-66	dMP2
MEF2A_ENSG00000068305	1.71E-97	0.61318911	0.347	0.201	4.29E-93	dMP2
FAM105A_ENSG00000145569	3.98E-161	0.609076901	0.313	0.127	9.99E-157	dMP2
GABARAP_ENSG00000170296	6.95E-76	0.607885307	0.397	0.291	1.74E-71	dMP2
RHOG_ENSG00000177105	8.03E-92	0.603532163	0.511	0.433	2.01E-87	dMP2
NPL_ENSG00000135838	3.42E-170	0.599779843	0.318	0.124	8.59E-166	dMP2
BLVRB_ENSG00000090013	9.43E-112	0.596496391	0.522	0.403	2.36E-107	dMP2
ARHGAP4_ENSG00000089820	4.25E-169	0.593729611	0.333	0.133	1.07E-164	dMP2
TIMP2_ENSG00000035862	2.60E-80	0.592680396	0.453	0.342	6.52E-76	dMP2
SPP1_ENSG00000118785	9.84E-160	0.591263499	0.595	0.4	2.47E-155	dMP2
CD84_ENSG00000066294	0	0.590443784	0.257	0.04	0	dMP2
ARPC3_ENSG00000111229	8.89E-267	0.587979296	0.876	0.876	2.23E-262	dMP2
JUN_ENSG00000177606	3.65E-256	0.585583093	0.975	0.828	9.15E-252	dMP2
RPPH1_ENSG00000259001	3.84E-193	0.584755214	0.191	0.045	9.63E-189	dMP2
UCP2_ENSG00000175567	4.90E-137	0.583781359	0.441	0.239	1.23E-132	dMP2
ADORA3_ENSG00000282608	0	0.580480945	0.215	0.011	0	dMP2
CTSC_ENSG00000109861	9.01E-144	0.577978086	0.749	0.703	2.26E-139	dMP2
CPVL_ENSG00000106066	1.31E-147	0.57731577	0.376	0.179	3.29E-143	dMP2
TUBA1B_ENSG00000123416	7.11E-184	0.573983429	0.845	0.785	1.78E-179	dMP2
USF2_ENSG00000105698	3.57E-75	0.571908621	0.332	0.209	8.97E-71	dMP2
GNB4_ENSG00000114450	6.86E-113	0.570923243	0.271	0.122	1.72E-108	dMP2
ETV5_ENSG00000244405	1.84E-205	0.566811651	0.237	0.065	4.61E-201	dMP2
HIF1A_ENSG00000100644	2.60E-58	0.564941042	0.478	0.425	6.52E-54	dMP2
TPP1_ENSG00000166340	2.32E-60	0.564723883	0.405	0.322	5.81E-56	dMP2
RENBP_ENSG00000102032	1.14E-295	0.564426954	0.257	0.055	2.86E-291	dMP2
MERTK_ENSG00000153208	0	0.564283009	0.215	0.033	0	dMP2
ITGAM_ENSG00000169896	5.19E-198	0.56207737	0.261	0.078	1.30E-193	dMP2
MKNK1_ENSG00000079277	1.79E-90	0.56108636	0.305	0.166	4.49E-86	dMP2
TMEM51_ENSG00000171729	2.23E-275	0.556228505	0.221	0.045	5.60E-271	dMP2
SLC15A3_ENSG00000110446	2.21E-234	0.550843094	0.239	0.059	5.55E-230	dMP2
HSP90AA1_ENSG00000080824	1.84E-203	0.550823014	0.906	0.891	4.61E-199	dMP2
EGR2_ENSG00000122877	2.06E-154	0.547309422	0.188	0.051	5.18E-150	dMP2
FUOM_ENSG00000148803	1.43E-151	0.546402153	0.26	0.094	3.58E-147	dMP2
CASP1_ENSG00000137752	6.46E-120	0.545900426	0.34	0.168	1.62E-115	dMP2
ITPR2_ENSG00000123104	1.10E-134	0.54560503	0.254	0.097	2.77E-130	dMP2
PLD3_ENSG00000105223	1.43E-53	0.545190908	0.541	0.543	3.59E-49	dMP2
UNC93B1_ENSG00000110057	2.42E-112	0.543659413	0.321	0.159	6.08E-108	dMP2
JUND_ENSG00000130522	9.50E-91	0.543628846	0.693	0.704	2.38E-86	dMP2
ARL4C_ENSG00000188042	3.00E-75	0.540345779	0.306	0.17	7.52E-71	dMP2
TNFSF12_ENSG00000239697	2.56E-129	0.536413375	0.267	0.109	6.43E-125	dMP2
B4GALT1_ENSG00000086062	5.14E-35	0.53561315	0.367	0.302	1.29E-30	dMP2
SLC7A7_ENSG00000155465	1.01E-197	0.535358159	0.251	0.073	2.53E-193	dMP2
PLXND1_ENSG00000004399	5.20E-81	0.53396618	0.269	0.142	1.30E-76	dMP2
TMSB10_ENSG00000034510	0	0.533323537	1	0.998	0	dMP2
ACTR2_ENSG00000138071	2.15E-65	0.531146088	0.54	0.511	5.40E-61	dMP2
HEXA_ENSG00000213614	5.75E-47	0.529863397	0.485	0.481	1.44E-42	dMP2
LAP3_ENSG00000002549	6.71E-52	0.529641126	0.403	0.332	1.68E-47	dMP2
CCND1_ENSG00000110092	2.22E-134	0.526958921	0.219	0.074	5.56E-130	dMP2
PTAFR_ENSG00000169403	0	0.525916212	0.216	0.03	0	dMP2
CPEB4_ENSG00000113742	3.95E-97	0.525485179	0.235	0.102	9.92E-93	dMP2
SIRPA_ENSG00000198053	8.34E-186	0.52536877	0.242	0.072	2.09E-181	dMP2
CLTC_ENSG00000141367	1.23E-36	0.524840821	0.346	0.286	3.09E-32	dMP2
DRAM2_ENSG00000156171	5.74E-43	0.524754328	0.385	0.327	1.44E-38	dMP2
EHBP1L1_ENSG00000173442	1.93E-138	0.522924752	0.232	0.081	4.85E-134	dMP2

RNF130_ENSG00000113269	7.36E-72	0.521988916	0.476	0.378	1.85E-67	dMP2
NDUFB1_ENSG00000183648	5.13E-81	0.521628386	0.65	0.677	1.29E-76	dMP2
NAMPT_ENSG00000105835	9.16E-59	0.520696504	0.455	0.377	2.30E-54	dMP2
IFNGR2_ENSG00000159128	7.03E-46	0.520461114	0.415	0.363	1.76E-41	dMP2
EFHD2_ENSG00000142634	6.04E-61	0.518703802	0.379	0.272	1.52E-56	dMP2
LYN_ENSG00000254087	4.79E-56	0.5180456	0.338	0.24	1.20E-51	dMP2
LILRB5_ENSG00000105609	0	0.51615337	0.168	0.013	0	dMP2
TM6SF1_ENSG00000136404	4.88E-269	0.515615891	0.234	0.05	1.22E-264	dMP2
C1orf162_ENSG00000143110	3.23E-123	0.511831459	0.388	0.189	8.11E-119	dMP2
TNFRSF1B_ENSG00000028137	7.77E-101	0.50859673	0.305	0.151	1.95E-96	dMP2
ATP5E_ENSG00000124172	0	0.507748342	0.987	0.97	0	dMP2
CADM1_ENSG00000182985	8.23E-129	0.506872122	0.225	0.079	2.07E-124	dMP2
SLC4A7_ENSG00000033867	2.03E-74	0.506406031	0.247	0.127	5.08E-70	dMP2
PTPN6_ENSG00000111679	9.78E-101	0.505756168	0.401	0.229	2.45E-96	dMP2
SNX6_ENSG00000129515	2.19E-42	0.505057658	0.488	0.492	5.48E-38	dMP2
HCLS1_ENSG00000180353	3.07E-84	0.504362055	0.449	0.311	7.69E-80	dMP2
PTPRJ_ENSG00000149177	1.72E-276	0.503659871	0.202	0.037	4.32E-272	dMP2
PLD4_ENSG00000166428	0	0.50344953	0.184	0.021	0	dMP2
CAPG_ENSG00000042493	9.98E-191	0.503333801	0.752	0.464	2.50E-186	dMP2
PLEKHO1_ENSG00000023902	1.38E-46	0.501406457	0.324	0.238	3.46E-42	dMP2
ATP6V1F_ENSG00000128524	7.11E-96	0.501138037	0.669	0.705	1.78E-91	dMP2
ANKH_ENSG00000154122	3.43E-62	0.500247361	0.238	0.13	8.59E-58	dMP2
CXCL8_ENSG00000169429	0	2.988468901	0.907	0.282	0	dMP1
IL1B_ENSG00000125538	0	2.765940892	0.766	0.122	0	dMP1
CXCL2_ENSG00000081041	0	2.76462106	0.797	0.171	0	dMP1
LYZ_ENSG00000090382	0	2.688285557	0.88	0.125	0	dMP1
CXCL3_ENSG00000163734	0	2.617866892	0.648	0.089	0	dMP1
S100A8_ENSG00000143546	0	2.580463197	0.452	0.057	0	dMP1
S100A9_ENSG00000163220	0	2.514195459	0.71	0.18	0	dMP1
G0S2_ENSG00000123689	0	2.35072647	0.51	0.093	0	dMP1
CCL3L3_ENSG00000276085	0	2.246262185	0.762	0.179	0	dMP1
GPR183_ENSG00000169508	0	2.142837468	0.852	0.139	0	dMP1
IER3_ENSG00000137331	0	2.116372547	0.934	0.424	0	dMP1
HLA-DRB1_ENSG00000196126	0	2.024891042	0.96	0.214	0	dMP1
BCL2A1_ENSG00000140379	0	2.021036525	0.728	0.067	0	dMP1
FTL_ENSG00000087086	0	1.973744266	1	0.993	0	dMP1
PLAUR_ENSG00000011422	0	1.968932404	0.906	0.296	0	dMP1
EREG_ENSG00000124882	0	1.967570436	0.495	0.022	0	dMP1
HLA-DRA_ENSG00000204287	0	1.957729002	0.988	0.339	0	dMP1
SPP1_ENSG00000118785	4.61E-275	1.769734594	0.678	0.396	1.16E-270	dMP1
HLA-DPA1_ENSG00002231389	0	1.760316229	0.929	0.274	0	dMP1
CCL20_ENSG00000115009	0	1.741397017	0.276	0.029	0	dMP1
NAMPT_ENSG00000105835	0	1.734622447	0.92	0.352	0	dMP1
CCL3_ENSG00000277632	0	1.733793461	0.965	0.438	0	dMP1
HLA-DPB1_ENSG00000223865	0	1.720478968	0.921	0.299	0	dMP1
IL1RN_ENSG00000136689	0	1.710425512	0.568	0.04	0	dMP1
HLA-DQB1_ENSG00000179344	0	1.68026167	0.862	0.136	0	dMP1
FTH1_ENSG00000167996	0	1.66562492	1	0.999	0	dMP1
HLA-DQA1_ENSG00000196735	0	1.650247975	0.766	0.102	0	dMP1
SGK1_ENSG00000118515	0	1.608557904	0.808	0.221	0	dMP1
HLA-DRB5_ENSG00000198502	0	1.605099686	0.912	0.16	0	dMP1
FCN1_ENSG00000085265	0	1.600065995	0.375	0.014	0	dMP1
CD74_ENSG00000019582	0	1.576897019	0.994	0.479	0	dMP1
CTSS_ENSG00000163131	0	1.572813418	0.888	0.268	0	dMP1
RP11-1143G9.4_ENSG00000257764	0	1.539975552	0.462	0.038	0	dMP1
C15orf48_ENSG00000166920	0	1.536792566	0.637	0.193	0	dMP1
AIF1_ENSG00000204472	0	1.526231744	0.944	0.199	0	dMP1
LST1_ENSG00000204482	0	1.506213231	0.804	0.121	0	dMP1
CD83_ENSG00000112149	0	1.499898548	0.835	0.156	0	dMP1
SOD2_ENSG00000112096	0	1.492256315	0.921	0.495	0	dMP1

CTSD_ENSG00000117984	0	1.430917977	0.919	0.785	0	dMP1
CD68_ENSG00000129226	0	1.416309178	0.89	0.312	0	dMP1
GPX1_ENSG00000233276	0	1.376577262	0.983	0.725	0	dMP1
FABP5_ENSG00000164687	2.71E-209	1.35637364	0.62	0.375	6.79E-205	dMP1
CCL4L2_ENSG00000276070	0	1.349002161	0.684	0.237	0	dMP1
SAT1_ENSG00000130066	0	1.339365199	0.995	0.844	0	dMP1
TYMP_ENSG00000025708	0	1.338092326	0.894	0.426	0	dMP1
FCGR3A_ENSG00002203747	0	1.335913694	0.671	0.09	0	dMP1
C5AR1_ENSG00000197405	0	1.325817396	0.689	0.051	0	dMP1
HLA-DMA_ENSG00000204257	0	1.29662234	0.792	0.156	0	dMP1
NFKBIA_ENSG00000100906	0	1.292307518	0.982	0.868	0	dMP1
C1QB_ENSG00000173369	0	1.291031809	0.663	0.217	0	dMP1
CTSB_ENSG00000164733	0	1.26150458	0.922	0.677	0	dMP1
C1QC_ENSG00000159189	0	1.256497384	0.641	0.178	0	dMP1
HLA-DQA2_ENSG00000237541	0	1.252946264	0.666	0.075	0	dMP1
APOC1_ENSG00000130208	2.83E-95	1.243776153	0.523	0.396	7.10E-91	dMP1
CYBA_ENSG00000051523	0	1.228749532	0.971	0.637	0	dMP1
RNASE1_ENSG00000129538	0	1.218462739	0.732	0.305	0	dMP1
SPI1_ENSG00000066336	0	1.212183727	0.79	0.093	0	dMP1
NEAT1_ENSG00000245532	0	1.210493461	0.982	0.856	0	dMP1
MS4A6A_ENSG00000110077	0	1.210012925	0.751	0.113	0	dMP1
C1QA_ENSG00000173372	0	1.209677597	0.7	0.245	0	dMP1
LINC00936_ENSG00000271614	0	1.195369904	0.636	0.114	0	dMP1
LAPTM5_ENSG00000162511	0	1.180556331	0.966	0.404	0	dMP1
TNF_ENSG00002232810	0	1.177564342	0.511	0.094	0	dMP1
GPNMB_ENSG00000136235	0	1.173423543	0.6	0.26	0	dMP1
CD14_ENSG00000170458	0	1.170741313	0.839	0.177	0	dMP1
TYROBP_ENSG00000011600	0	1.165786056	0.997	0.479	0	dMP1
NLRP3_ENSG00000162711	0	1.16520169	0.482	0.02	0	dMP1
FCGR2A_ENSG00000143226	0	1.147089172	0.68	0.083	0	dMP1
OLR1_ENSG00000173391	0	1.129122374	0.597	0.134	0	dMP1
PTGS2_ENSG00000073756	0	1.129085257	0.386	0.021	0	dMP1
MSR1_ENSG00000038945	0	1.12155835	0.519	0.056	0	dMP1
CSTA_ENSG00000121552	0	1.115165276	0.572	0.093	0	dMP1
IFI30_ENSG00000216490	0	1.114724379	0.608	0.052	0	dMP1
PSAP_ENSG00000197746	0	1.109517153	0.99	0.832	0	dMP1
CXCL16_ENSG00000161921	0	1.108416044	0.68	0.102	0	dMP1
CTSZ_ENSG00000101160	0	1.097229678	0.755	0.294	0	dMP1
CLEC7A_ENSG00000172243	0	1.093181347	0.656	0.064	0	dMP1
SRGN_ENSG00000122862	0	1.077358327	0.996	0.53	0	dMP1
LY96_ENSG00000154589	0	1.076976234	0.733	0.128	0	dMP1
SERPINA1_ENSG00000197249	0	1.057221388	0.556	0.059	0	dMP1
MS4A7_ENSG00000166927	0	1.055900628	0.702	0.089	0	dMP1
RNASE6_ENSG00000169413	0	1.0334729	0.678	0.087	0	dMP1
S100A12_ENSG00000163221	0	1.028342969	0.175	0.003	0	dMP1
MNDA_ENSG00000163563	0	1.024386263	0.539	0.056	0	dMP1
HLA-DMB_ENSG00000242574	0	1.016927921	0.645	0.12	0	dMP1
RNASET2_ENSG00000026297	0	1.015749834	0.823	0.314	0	dMP1
MAFB_ENSG00000204103	0	1.013206119	0.612	0.157	0	dMP1
PLEK_ENSG00000115956	0	1.012619955	0.677	0.145	0	dMP1
TREM2_ENSG00000095970	0	1.008844713	0.545	0.094	0	dMP1
PHACTR1_ENSG00000112137	0	0.98753671	0.534	0.056	0	dMP1
SDS_ENSG00000135094	0	0.973934409	0.391	0.026	0	dMP1
GRN_ENSG00000030582	0	0.966234818	0.913	0.605	0	dMP1
HMOX1_ENSG00000100292	0	0.963240393	0.525	0.174	0	dMP1
RGS2_ENSG00000116741	0	0.956324467	0.715	0.348	0	dMP1
S100A10_ENSG00000197747	0	0.946589977	0.927	0.501	0	dMP1
GLUL_ENSG00000135821	0	0.941962648	0.887	0.634	0	dMP1
C1orf162_ENSG00000143110	0	0.928212402	0.702	0.172	0	dMP1
SLC11A1_ENSG00000018280	0	0.925857956	0.514	0.046	0	dMP1

NPC2_ENSG00000119655	0	0.92009947	0.967	0.752	0	dMP1
TNFSF13B_ENSG00000102524	0	0.916355499	0.57	0.052	0	dMP1
TREM1_ENSG00000124731	0	0.915893922	0.452	0.038	0	dMP1
LGMN_ENSG00000100600	5.46E-210	0.913976391	0.575	0.309	1.37E-205	dMP1
HBEGF_ENSG00000113070	0	0.906532068	0.485	0.046	0	dMP1
ITGB2_ENSG00000160255	0	0.90360556	0.829	0.273	0	dMP1
CSTB_ENSG00000160213	1.26E-256	0.897821622	0.878	0.756	3.15E-252	dMP1
OSM_ENSG00000099985	0	0.876807619	0.398	0.075	0	dMP1
CD9_ENSG00000010278	0	0.871926214	0.677	0.308	0	dMP1
ZEB2_ENSG00000169554	0	0.864626806	0.689	0.24	0	dMP1
CHMP1B_ENSG00000255112	3.72E-215	0.85374567	0.727	0.536	9.34E-211	dMP1
IL10_ENSG00000136634	0	0.844533592	0.328	0.017	0	dMP1
PLIN2_ENSG00000147872	2.67E-231	0.842772595	0.725	0.476	6.70E-227	dMP1
FGL2_ENSG00000127951	0	0.839205791	0.489	0.07	0	dMP1
CDKN1A_ENSG00000124762	0	0.838550563	0.652	0.268	0	dMP1
TNFAIP3_ENSG00000118503	0	0.8358732	0.761	0.407	0	dMP1
LY86_ENSG00000112799	0	0.831680014	0.599	0.068	0	dMP1
APOBEC3A_ENSG00000128383	0	0.830387389	0.228	0.006	0	dMP1
CD44_ENSG00000026508	0	0.815342399	0.87	0.552	0	dMP1
CYBB_ENSG00000165168	0	0.811374904	0.545	0.071	0	dMP1
HIF1A_ENSG00000100644	0	0.809823459	0.735	0.411	0	dMP1
VMO1_ENSG00000182853	0	0.808183926	0.296	0.025	0	dMP1
FPR3_ENSG00000187474	0	0.803372331	0.449	0.034	0	dMP1
VEGFA_ENSG00000112715	0	0.798471351	0.425	0.088	0	dMP1
CD163_ENSG00000177575	0	0.794877871	0.438	0.058	0	dMP1
CD86_ENSG00000114013	0	0.790261044	0.512	0.045	0	dMP1
MXD1_ENSG00000059728	0	0.788702589	0.475	0.083	0	dMP1
CH17-373J23.1_ENSG00000276216	0	0.787956358	0.426	0.108	0	dMP1
RP11-670E13.6_ENSG00000274213	3.31E-276	0.785366912	0.386	0.128	8.30E-272	dMP1
FCGRT_ENSG00000104870	0	0.782165841	0.842	0.485	0	dMP1
PHLDA1_ENSG00000139289	4.18E-123	0.771780239	0.551	0.345	1.05E-118	dMP1
OTUD1_ENSG00000165312	0	0.760436238	0.478	0.12	0	dMP1
PLD3_ENSG00000105223	2.54E-90	0.757792442	0.624	0.538	6.38E-86	dMP1
PPIF_ENSG00000108179	1.66E-251	0.753979549	0.453	0.186	4.17E-247	dMP1
EMP3_ENSG00000142227	3.84E-299	0.751465887	0.877	0.656	9.62E-295	dMP1
ASAH1_ENSG00000104763	0	0.751365769	0.775	0.512	0	dMP1
ICAM1_ENSG00000090339	0	0.742601492	0.512	0.136	0	dMP1
PNRC1_ENSG00000146278	3.12E-237	0.73969912	0.928	0.824	7.82E-233	dMP1
NFKBIZ_ENSG00000144802	2.22E-301	0.739322372	0.754	0.43	5.58E-297	dMP1
KLF6_ENSG00000067082	1.17E-303	0.738740354	0.941	0.798	2.94E-299	dMP1
HSPA1A_ENSG00000204389	1.10E-62	0.735094133	0.549	0.427	2.75E-58	dMP1
IGSF6_ENSG00000140749	0	0.735079297	0.469	0.057	0	dMP1
EVI2B_ENSG00000185862	0	0.733132315	0.605	0.162	0	dMP1
CEBPB_ENSG00000172216	7.85E-275	0.732191814	0.885	0.62	1.97E-270	dMP1
NINJ1_ENSG00000131669	0	0.731888111	0.66	0.319	0	dMP1
FCER1G_ENSG00000158869	0	0.729185732	0.989	0.463	0	dMP1
TSPO_ENSG00000100300	0	0.724397522	0.84	0.58	0	dMP1
LINC01272_ENSG00000224397	0	0.715719092	0.349	0.022	0	dMP1
FPR1_ENSG00000171051	0	0.714684931	0.41	0.029	0	dMP1
TGFBI_ENSG00000120708	0	0.714218	0.668	0.277	0	dMP1
CSF1R_ENSG00000182578	0	0.710379827	0.568	0.111	0	dMP1
TNFRSF1B_ENSG00000028137	0	0.709809848	0.543	0.138	0	dMP1
FAM26F_ENSG00000188820	0	0.709014319	0.448	0.078	0	dMP1
ARRB2_ENSG00000141480	0	0.705774437	0.616	0.174	0	dMP1
AP1S2_ENSG00000182287	4.35E-221	0.704798102	0.611	0.34	1.09E-216	dMP1
AQP9_ENSG00000103569	0	0.700724907	0.288	0.012	0	dMP1
NCF2_ENSG00000116701	0	0.698575376	0.445	0.031	0	dMP1
RNF130_ENSG00000113269	0	0.693339537	0.712	0.365	0	dMP1
RGS10_ENSG00000148908	0	0.692334011	0.681	0.332	0	dMP1
LILRB4_ENSG00000186818	0	0.690045797	0.447	0.04	0	dMP1

RILPL2_ENSG00000150977	0	0.687309156	0.506	0.172	0	dMP1
STX11_ENSG00000135604	0	0.683152241	0.451	0.077	0	dMP1
CD4_ENSG00000010610	0	0.681423152	0.484	0.08	0	dMP1
RASGEF1B_ENSG00000138670	0	0.67911445	0.455	0.117	0	dMP1
LIPA_ENSG00000107798	1.50E-79	0.677431399	0.457	0.326	3.75E-75	dMP1
RGS1_ENSG00000090104	0	0.673644842	0.877	0.4	0	dMP1
S100A4_ENSG00000196154	1.35E-233	0.672599973	0.95	0.83	3.39E-229	dMP1
CTSH_ENSG00000103811	1.30E-273	0.67205713	0.631	0.319	3.26E-269	dMP1
MS4A4A_ENSG00000110079	0	0.670913055	0.452	0.081	0	dMP1
INSIG1_ENSG00000186480	3.59E-159	0.668699661	0.416	0.198	9.01E-155	dMP1
STXBP2_ENSG00000076944	2.66E-196	0.658190518	0.531	0.256	6.66E-192	dMP1
GADD45B_ENSG00000099860	7.12E-241	0.656845202	0.879	0.704	1.78E-236	dMP1
ATP6V1F_ENSG00000128524	4.84E-274	0.656591925	0.845	0.695	1.21E-269	dMP1
S100A11_ENSG00000163191	0	0.655280913	0.987	0.907	0	dMP1
ARL4C_ENSG00000188042	2.40E-303	0.653924954	0.479	0.161	6.03E-299	dMP1
KDM6B_ENSG00000132510	4.43E-300	0.651237327	0.539	0.216	1.11E-295	dMP1
PYCARD_ENSG00000103490	0	0.650371963	0.685	0.294	0	dMP1
RP11-386I14.4_ENSG00000273338	8.30E-275	0.648895243	0.474	0.17	2.08E-270	dMP1
PFKFB3_ENSG00000170525	0	0.646374202	0.382	0.079	0	dMP1
DSE_ENSG00000111817	0	0.642938079	0.422	0.082	0	dMP1
ACP5_ENSG00000102575	4.98E-142	0.629147053	0.488	0.259	1.25E-137	dMP1
BRI3_ENSG00000164713	9.65E-251	0.622911637	0.72	0.443	2.42E-246	dMP1
ISG15_ENSG00000187608	1.96E-142	0.621166721	0.791	0.613	4.92E-138	dMP1
MARCKS_ENSG00000277443	6.16E-239	0.620505304	0.7	0.391	1.55E-234	dMP1
PLSCR1_ENSG00000188313	9.21E-244	0.619123819	0.657	0.376	2.31E-239	dMP1
CST3_ENSG00000101439	3.55E-295	0.617856793	0.985	0.826	8.90E-291	dMP1
C3AR1_ENSG00000171860	0	0.617651191	0.428	0.06	0	dMP1
LRRFIP1_ENSG00000124831	2.99E-211	0.615921193	0.72	0.463	7.50E-207	dMP1
LIMS1_ENSG00000169756	1.10E-195	0.615495179	0.619	0.379	2.75E-191	dMP1
CREG1_ENSG00000143162	4.74E-220	0.612880842	0.536	0.266	1.19E-215	dMP1
GMFG_ENSG00000130755	0	0.611475505	0.781	0.358	0	dMP1
NR4A3_ENSG00000119508	0	0.609593506	0.376	0.071	0	dMP1
MFSD1_ENSG00000118855	3.58E-258	0.60708479	0.537	0.243	8.97E-254	dMP1
PPT1_ENSG00000131238	5.89E-224	0.603234162	0.616	0.36	1.48E-219	dMP1
ABL2_ENSG00000143322	1.68E-205	0.599384083	0.302	0.097	4.20E-201	dMP1
PILRA_ENSG00000085514	0	0.598786838	0.528	0.179	0	dMP1
CD300E_ENSG00000186407	0	0.594997879	0.261	0.004	0	dMP1
SLC7A7_ENSG00000155465	0	0.59372285	0.417	0.064	0	dMP1
PPP1R15A_ENSG00000087074	1.34E-215	0.592108254	0.91	0.781	3.36E-211	dMP1
STAB1_ENSG00000010327	0	0.5905682	0.414	0.108	0	dMP1
CPVL_ENSG00000106066	0	0.590339001	0.506	0.173	0	dMP1
IER5_ENSG00000162783	9.24E-205	0.584285049	0.536	0.258	2.32E-200	dMP1
CLEC10A_ENSG00000132514	0	0.584092825	0.198	0.008	0	dMP1
OAZ1_ENSG00000104904	0	0.582960468	0.984	0.957	0	dMP1
TTYH3_ENSG00000136295	0	0.58245745	0.353	0.092	0	dMP1
CECR1_ENSG00000093072	0	0.581612051	0.416	0.076	0	dMP1
LAIR1_ENSG00000167613	0	0.579358746	0.441	0.088	0	dMP1
H2AFY_ENSG00000113648	4.76E-202	0.579192036	0.724	0.529	1.19E-197	dMP1
CD93_ENSG00000125810	0	0.576723133	0.392	0.059	0	dMP1
EIF4E_ENSG00000151247	2.26E-69	0.57609097	0.558	0.453	5.67E-65	dMP1
HCK_ENSG00000101336	0	0.575206074	0.409	0.043	0	dMP1
KB-1507C5.4_ENSG00000254281	0	0.574470129	0.255	0.007	0	dMP1
FCGR1A_ENSG00000150337	0	0.56767869	0.393	0.053	0	dMP1
VIM_ENSG00000026025	2.10E-236	0.562243211	0.985	0.815	5.26E-232	dMP1
PDE4B_ENSG00000184588	0	0.55986202	0.428	0.121	0	dMP1
BNIP3L_ENSG00000104765	3.02E-124	0.552971073	0.627	0.455	7.58E-120	dMP1
MPEG1_ENSG00000197629	0	0.551943279	0.396	0.042	0	dMP1
ETS2_ENSG00000157557	1.10E-147	0.549679293	0.494	0.28	2.76E-143	dMP1
TPP1_ENSG00000166340	1.29E-197	0.546641905	0.567	0.313	3.25E-193	dMP1
JUND_ENSG00000130522	7.29E-163	0.546449418	0.839	0.696	1.83E-158	dMP1

MAP3K8_ENSG00000107968	1.68E-165	0.544729714	0.687	0.446	4.22E-161	dMP1
MGAT1_ENSG00000131446	3.34E-156	0.544043938	0.627	0.422	8.37E-152	dMP1
JAML_ENSG00000160593	0	0.538614651	0.294	0.031	0	dMP1
MCL1_ENSG00000143384	2.80E-267	0.534128161	0.949	0.811	7.01E-263	dMP1
CD36_ENSG00000135218	0	0.533477331	0.363	0.083	0	dMP1
GNA13_ENSG00000120063	3.25E-294	0.53341129	0.449	0.152	8.14E-290	dMP1
VSIG4_ENSG00000155659	0	0.530688413	0.372	0.082	0	dMP1
ALOX5AP_ENSG00000132965	5.78E-198	0.529345019	0.552	0.238	1.45E-193	dMP1
GSTO1_ENSG00000148834	1.76E-159	0.528212086	0.726	0.558	4.41E-155	dMP1
CARD16_ENSG00000204397	1.03E-183	0.527939246	0.598	0.32	2.59E-179	dMP1
CD37_ENSG00000104894	7.79E-297	0.527870739	0.737	0.307	1.95E-292	dMP1
UPP1_ENSG00000183696	1.47E-188	0.526746897	0.536	0.259	3.70E-184	dMP1
ATF5_ENSG00000169136	1.55E-211	0.526190995	0.34	0.117	3.89E-207	dMP1
THBD_ENSG00000178726	9.69E-215	0.526181833	0.266	0.073	2.43E-210	dMP1
METRNL_ENSG00000176845	3.21E-242	0.525167742	0.443	0.162	8.04E-238	dMP1
SIRPA_ENSG00000198053	0	0.524058127	0.367	0.065	0	dMP1
CFP_ENSG00000126759	0	0.523022917	0.198	0.008	0	dMP1
KLF4_ENSG00000136826	2.88E-165	0.521838639	0.723	0.456	7.23E-161	dMP1
GK_ENSG00000198814	0	0.520977797	0.287	0.034	0	dMP1
LGALS9_ENSG00000168961	1.14E-230	0.520781708	0.592	0.281	2.86E-226	dMP1
SAMHD1_ENSG00000101347	0	0.518803778	0.504	0.165	0	dMP1
MARCO_ENSG00000019169	0	0.518190565	0.192	0.016	0	dMP1
ODF3B_ENSG00000177989	2.14E-289	0.518113705	0.407	0.13	5.36E-285	dMP1
ATP6V0B_ENSG00000117410	4.63E-207	0.517667803	0.797	0.629	1.16E-202	dMP1
SH3BGRL3_ENSG00000142669	4.58E-263	0.516356958	0.978	0.903	1.15E-258	dMP1
RUNX1_ENSG00000159216	2.07E-304	0.514900891	0.428	0.131	5.18E-300	dMP1
CXCL1_ENSG00000163739	2.55E-186	0.514503899	0.134	0.023	6.39E-182	dMP1
CCRL2_ENSG00000121797	0	0.512240353	0.3	0.042	0	dMP1
THAP2_ENSG00000173451	3.01E-173	0.509124642	0.301	0.108	7.55E-169	dMP1
PTPRE_ENSG00000132334	1.41E-205	0.509057949	0.47	0.205	3.55E-201	dMP1
ZNF385A_ENSG00000161642	2.96E-251	0.508470318	0.377	0.128	7.42E-247	dMP1
GNAI2_ENSG00000114353	9.34E-192	0.506947891	0.686	0.441	2.34E-187	dMP1
NPL_ENSG00000135838	3.58E-287	0.506855896	0.396	0.12	8.98E-283	dMP1
MT-ND3_ENSG00000198840	1.50E-181	0.506470206	0.983	0.952	3.77E-177	dMP1
RHOG_ENSG00000177105	8.98E-164	0.504239943	0.634	0.427	2.25E-159	dMP1
RP11-160E2.6_ENSG00000262202	8.82E-157	0.502549584	0.388	0.171	2.21E-152	dMP1
THEMIS2_ENSG00000130775	0	0.500139096	0.38	0.058	0	dMP1

Appendix 9 - Genes differentially expressed between maternal mononuclear phagocytes (|log$_2$(fold-change)| ≥ 1.0, adjusted p < 0.05):

Gene ID/Ensembl ID	p value	log2(fold change)	pct.1	pct.2	adjusted p value	cluster
APOC1_ENSG00000130208	1.63E-215	2.357334076	0.984	0.492	4.10E-211	pIMP
APOE_ENSG00000130203	3.76E-162	2.029333108	0.961	0.619	9.42E-158	pIMP
CGA_ENSG00000135346	0.00E+00	1.886344068	0.928	0.026	0.00E+00	pIMP
PAGE4_ENSG00000101951	0	1.722991913	0.796	0.012	0	pIMP
GCHFR_ENSG00000137880	8.17E-272	1.637063863	0.88	0.184	2.05E-267	pIMP
SPP1_ENSG00000118785	2.09E-63	1.592918289	0.954	0.636	5.24E-59	pIMP
FABP5_ENSG00000164687	2.55E-178	1.553425842	0.977	0.376	6.39E-174	pIMP
CHI3L1_ENSG00000133048	0.00E+00	1.407906861	0.389	0.003	0.00E+00	pIMP
LGALS3_ENSG00000131981	6.41E-156	1.241710591	0.984	0.556	1.61E-151	pIMP
CSTB_ENSG00000160213	4.00E-139	1.179349318	0.998	0.795	1.00E-134	pIMP
CD9_ENSG00000010278	3.03E-150	1.172126361	0.988	0.512	7.61E-146	pIMP
ACP5_ENSG00000102575	9.50E-158	1.15799954	0.905	0.315	2.38E-153	pIMP
ANXA2_ENSG00000182718	4.91E-155	1.07820269	0.998	0.716	1.23E-150	pIMP
VIM_ENSG00000026025	1.91E-124	1.028287648	1	0.783	4.80E-120	pIMP
KRT8_ENSG00000170421	0.00E+00	1.027293567	0.843	0.032	0.00E+00	pIMP
LIPA_ENSG00000107798	1.20E-151	1.023098163	0.961	0.378	3.00E-147	pIMP
FN1_ENSG00000115414	2.09E-222	1.021857998	0.861	0.163	5.24E-218	pIMP
KRT18_ENSG00000111057	0.00E+00	1.005458258	0.794	0.025	0.00E+00	pIMP
GPNMB_ENSG00000136235	7.16E-131	1.005241646	0.963	0.432	1.80E-126	pIMP
PNRC1_ENSG00000146278	5.20E-59	-1.00617427	0.773	0.794	1.30E-54	pIMP
FCGR2A_ENSG00000143226	2.11E-62	-1.049019156	0.463	0.685	5.30E-58	pIMP
KLF2_ENSG00000127528	1.71E-39	-1.059375232	0.218	0.484	4.30E-35	pIMP
NAMPT_ENSG00000105835	7.94E-44	-1.073553012	0.62	0.684	1.99E-39	pIMP
IFITM2_ENSG00000185201	2.54E-72	-1.084092124	0.532	0.723	6.38E-68	pIMP
GADD45B_ENSG00000099860	7.03E-89	-1.102790277	0.843	0.876	1.76E-84	pIMP
IER5_ENSG00000162783	1.63E-45	-1.103162137	0.324	0.56	4.10E-41	pIMP
TNFAIP3_ENSG00000118503	3.63E-34	-1.105763493	0.322	0.514	9.11E-30	pIMP
MAF_ENSG00000178573	2.08E-33	-1.111278399	0.373	0.53	5.21E-29	pIMP
EREG_ENSG00000124882	8.41E-07	-1.116553011	0.183	0.258	2.11E-02	pIMP
IFITM3_ENSG00000142089	9.24E-76	-1.130125951	0.789	0.827	2.32E-71	pIMP
RHOB_ENSG00000143878	6.67E-46	-1.158336745	0.627	0.702	1.67E-41	pIMP
DNAJB1_ENSG00000132002	3.01E-32	-1.17511846	0.433	0.552	7.55E-28	pIMP
IER2_ENSG00000160888	1.82E-98	-1.179960769	0.907	0.918	4.57E-94	pIMP
DUSP2_ENSG00000158050	8.87E-44	-1.202157774	0.394	0.597	2.23E-39	pIMP
F13A1_ENSG00000124491	1.97E-54	-1.224712944	0.06	0.441	4.93E-50	pIMP
FOSB_ENSG00000125740	8.89E-109	-1.241229351	0.81	0.874	2.23E-104	pIMP
CCL20_ENSG00000115009	6.07E-16	-1.26214616	0.014	0.157	1.52E-11	pIMP
GZMA_ENSG00000145649	1.84E-88	-1.263881381	0.035	0.569	4.62E-84	pIMP
KLF6_ENSG00000067082	3.12E-126	-1.277370365	0.912	0.948	7.82E-122	pIMP
SLC40A1_ENSG00000138449	2.47E-33	-1.333709594	0.301	0.501	6.19E-29	pIMP
CTSW_ENSG00000172543	4.77E-102	-1.341363138	0.06	0.637	1.20E-97	pIMP
GPR183_ENSG00000169508	1.04E-54	-1.347184726	0.56	0.712	2.62E-50	pIMP
JUN_ENSG00000177606	1.22E-83	-1.35461767	0.905	0.912	3.05E-79	pIMP
NFKBIA_ENSG00000100906	4.70E-94	-1.358789934	0.896	0.921	1.18E-89	pIMP
STAB1_ENSG00000010327	1.22E-63	-1.417779194	0.282	0.604	3.07E-59	pIMP
CD14_ENSG00000170458	3.99E-108	-1.43005694	0.729	0.909	1.00E-103	pIMP
GZMB_ENSG00000100453	2.63E-124	-1.476350079	0.046	0.708	6.59E-120	pIMP
EGR1_ENSG00000120738	5.36E-95	-1.59591603	0.319	0.718	1.34E-90	pIMP
C1QC_ENSG00000159189	6.67E-93	-1.658588054	0.6	0.823	1.67E-88	pIMP
RNASE1_ENSG00000129538	6.27E-75	-1.725105782	0.72	0.859	1.57E-70	pIMP
C1QB_ENSG00000173369	8.39E-99	-1.726598542	0.546	0.834	2.10E-94	pIMP
IER3_ENSG00000137331	1.95E-111	-1.733805299	0.646	0.846	4.90E-107	pIMP
CXCL2_ENSG00000081041	2.13E-26	-1.735894111	0.419	0.558	5.34E-22	pIMP
CXCL3_ENSG00000163734	2.27E-30	-1.776251535	0.185	0.433	5.69E-26	pIMP
NKG7_ENSG00000105374	9.31E-171	-1.816014588	0.102	0.849	2.34E-166	pIMP
CCL3_ENSG00000277632	1.90E-149	-1.844844821	0.799	0.968	4.78E-145	pIMP
C1QA_ENSG00000173372	5.69E-107	-1.865602774	0.569	0.851	1.43E-102	pIMP

FOLR2_ENSG00000165457	2.43E-95	-1.872586817	0.199	0.671	6.09E-91	pIMP
HSPA1B_ENSG00000204388	1.74E-81	-1.951539763	0.215	0.629	4.36E-77	pIMP
CCL3L3_ENSG00000276085	1.55E-103	-2.004003108	0.382	0.79	3.90E-99	pIMP
IL1B_ENSG00000125538	8.51E-49	-2.176179776	0.183	0.502	2.13E-44	pIMP
HSPA1A_ENSG00000204389	1.84E-100	-2.232529963	0.384	0.746	4.61E-96	pIMP
CXCL8_ENSG00000169429	1.29E-95	-2.299218151	0.412	0.78	3.24E-91	pIMP
CCL4L2_ENSG00000276070	1.25E-108	-2.301416181	0.19	0.732	3.12E-104	pIMP
SEPP1_ENSG00000250722	3.15E-86	-2.38568031	0.31	0.701	7.90E-82	pIMP
CCL4_ENSG00000275302	6.21E-194	-2.616398891	0.25	0.941	1.56E-189	pIMP
GNLY_ENSG00000115523	2.37E-236	-3.18759823	0.16	0.984	5.95E-232	pIMP
SEPP1_ENSG00000250722	0.00E+00	1.893575834	0.943	0.426	0.00E+00	dMP2
FOLR2_ENSG00000165457	0.00E+00	1.596688389	0.927	0.371	0.00E+00	dMP2
SLC40A1_ENSG00000138449	0.00E+00	1.592508577	0.769	0.239	0.00E+00	dMP2
C1QA_ENSG00000173372	0.00E+00	1.427869753	0.999	0.676	0.00E+00	dMP2
C1QC_ENSG00000159189	0.00E+00	1.343666208	1	0.634	0.00E+00	dMP2
RNASE1_ENSG00000129538	0.00E+00	1.321671818	0.982	0.73	0.00E+00	dMP2
C1QB_ENSG00000173369	0.00E+00	1.317559841	1	0.642	0.00E+00	dMP2
C3_ENSG00000125730	1.84E-217	1.301788333	0.611	0.221	4.62E-213	dMP2
HSPA1B_ENSG00000204388	0.00E+00	1.272026455	0.884	0.339	0.00E+00	dMP2
MAF_ENSG00000178573	1.21E-275	1.238218086	0.74	0.325	3.03E-271	dMP2
HSPA1A_ENSG00000204389	0.00E+00	1.198944617	0.937	0.519	0.00E+00	dMP2
F13A1_ENSG00000124491	1.50E-221	1.187032054	0.627	0.216	3.76E-217	dMP2
OLFML3_ENSG00000116774	8.94E-194	1.169044581	0.522	0.151	2.24E-189	dMP2
GPR34_ENSG00000171659	8.81E-234	1.166052286	0.688	0.316	2.21E-229	dMP2
STAB1_ENSG00000010327	1.27E-269	1.158687027	0.789	0.39	3.19E-265	dMP2
CD14_ENSG00000170458	0	1.150999704	0.976	0.819	0	dMP2
LPAR6_ENSG00000139679	2.84E-204	1.108745621	0.652	0.309	7.11E-200	dMP2
JUN_ENSG00000177606	0.00E+00	1.091122783	0.975	0.858	0.00E+00	dMP2
CCL2_ENSG00000108691	8.12E-83	1.070118251	0.497	0.256	2.04E-78	dMP2
TMEM176B_ENSG00000106565	1.10E-227	1.05745291	0.735	0.358	2.76E-223	dMP2
DAB2_ENSG00000153071	1.13E-200	1.046895573	0.757	0.489	2.84E-196	dMP2
RHOB_ENSG00000143878	5.82E-211	1.020229939	0.819	0.589	1.46E-206	dMP2
BIN1_ENSG00000136717	2.21E-146	1.004220589	0.492	0.189	5.53E-142	dMP2
AREG_ENSG00000109321	1.25E-96	-1.029551651	0.156	0.45	3.14E-92	dMP2
FTH1_ENSG00000167996	0.00E+00	-1.078484835	1	1	0.00E+00	dMP2
DUSP2_ENSG00000158050	1.25E-183	-1.100293034	0.362	0.758	3.13E-179	dMP2
CD44_ENSG00000026508	0	-1.114642725	0.304	0.879	0	dMP2
RP11-1143G9.4_ENSG00000257764	4.84E-126	-1.115265986	0.126	0.474	1.21E-121	dMP2
LGALS3_ENSG00000131981	2.85E-225	-1.127455806	0.35	0.807	7.16E-221	dMP2
LSP1_ENSG00000130592	0	-1.12876955	0.277	0.876	0	dMP2
CD52_ENSG00000169442	1.29E-177	-1.13928875	0.348	0.757	3.23E-173	dMP2
NFKBIA_ENSG00000100906	1.57E-200	-1.166381609	0.862	0.966	3.93E-196	dMP2
PHLDA1_ENSG00000139289	4.79E-219	-1.235264547	0.099	0.558	1.20E-214	dMP2
RGCC_ENSG00000102760	8.06E-256	-1.255856011	0.175	0.688	2.02E-251	dMP2
PLAUR_ENSG00000011422	0	-1.281807079	0.418	0.912	0	dMP2
S100A10_ENSG00000197747	0	-1.289739598	0.476	0.94	0	dMP2
PLIN2_ENSG00000147872	1.76E-277	-1.298291392	0.219	0.759	4.41E-273	dMP2
SPP1_ENSG00000118785	2.16E-37	-1.348963725	0.595	0.728	5.41E-33	dMP2
SOD2_ENSG00000112096	3.85E-267	-1.366985457	0.48	0.909	9.65E-263	dMP2
OLR1_ENSG00000173391	0	-1.367048177	0.081	0.656	0	dMP2
FN1_ENSG00000115414	1.52E-158	-1.373073627	0.046	0.388	3.81E-154	dMP2
TIMP1_ENSG00000102265	6.78E-227	-1.429458876	0.334	0.813	1.70E-222	dMP2
FCN1_ENSG00000085265	2.87E-167	-1.447908651	0.017	0.351	7.21E-163	dMP2
CXCL8_ENSG00000169429	9.22E-113	-1.463815604	0.657	0.817	2.31E-108	dMP2
S100A6_ENSG00000197956	0	-1.487052586	0.637	0.975	0	dMP2
APOC1_ENSG00000130208	1.04E-48	-1.557089526	0.462	0.607	2.60E-44	dMP2
CCL20_ENSG00000115009	1.45E-72	-1.568852622	0.041	0.228	3.63E-68	dMP2
IL1RN_ENSG00000136689	3.87E-243	-1.56894386	0.077	0.549	9.71E-239	dMP2
S100A9_ENSG00000163220	1.34E-98	-1.609065871	0.428	0.741	3.36E-94	dMP2
BCL2A1_ENSG00000140379	0.00E+00	-1.652186217	0.135	0.716	0.00E+00	dMP2
VIM_ENSG00000026025	0.00E+00	-1.712454417	0.586	0.988	0.00E+00	dMP2
C15orf48_ENSG00000166920	0.00E+00	-1.771287796	0.119	0.684	0.00E+00	dMP2

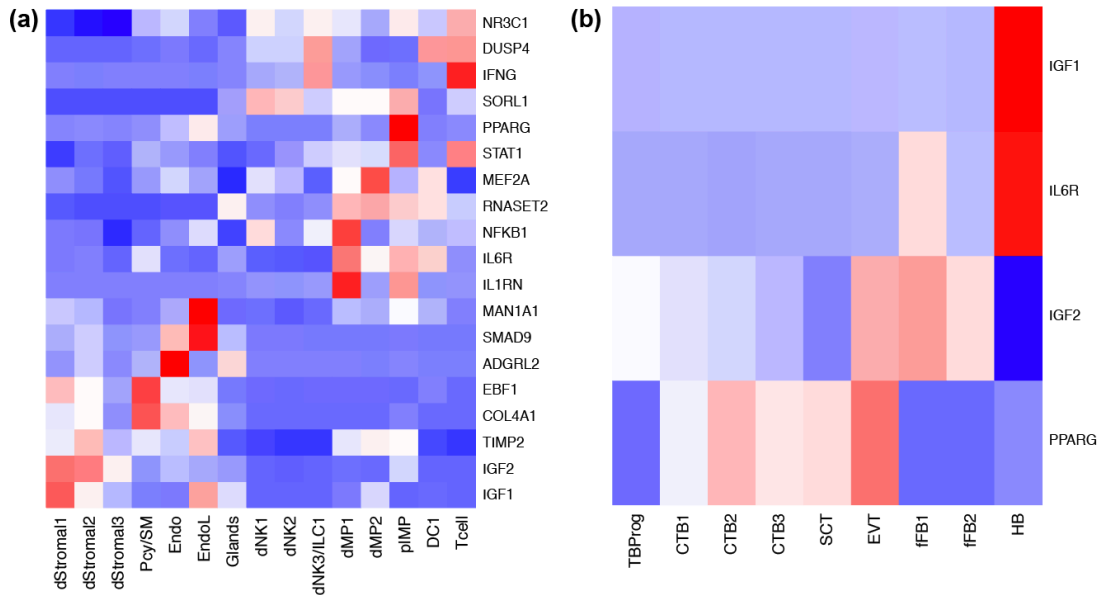|						
EREG_ENSG00000124882	8.93E-216	-1.773313648	0.027	0.438	2.24E-211	dMP2
CXCL3_ENSG00000163734	1.43E-141	-1.790987813	0.224	0.564	3.58E-137	dMP2
LYZ_ENSG00000090382	1.16E-291	-1.824137521	0.426	0.892	2.90E-287	dMP2
CXCL2_ENSG00000081041	3.04E-204	-1.912993795	0.327	0.728	7.62E-200	dMP2
IL1B_ENSG00000125538	1.46E-206	-2.001437266	0.246	0.66	3.67E-202	dMP2
S100A8_ENSG00000143546	1.14E-153	-2.093196617	0.137	0.509	2.86E-149	dMP2
FABP5_ENSG00000164687	2.09E-299	-2.11722936	0.139	0.685	5.24E-295	dMP2
G0S2_ENSG00000123689	1.19E-221	-2.352174009	0.054	0.487	2.98E-217	dMP2
G0S2_ENSG00000123689	4.56E-209	2.323849913	0.51	0.112	1.14E-204	dMP1
IL1B_ENSG00000125538	0.00E+00	2.269956654	0.766	0.234	0.00E+00	dMP1
CXCL2_ENSG00000081041	7.66E-299	2.129194335	0.797	0.343	1.92E-294	dMP1
CXCL3_ENSG00000163734	2.14E-228	2.027952194	0.648	0.217	5.36E-224	dMP1
EREG_ENSG00000124882	4.11E-259	1.884524355	0.495	0.055	1.03E-254	dMP1
CXCL8_ENSG00000169429	2.02E-269	1.781901101	0.907	0.614	5.07E-265	dMP1
S100A8_ENSG00000143546	6.17E-57	1.763423795	0.452	0.248	1.55E-52	dMP1
CCL20_ENSG00000115009	3.43E-116	1.745151483	0.276	0.037	8.61E-112	dMP1
BCL2A1_ENSG00000140379	6.85E-288	1.599638309	0.728	0.228	1.72E-283	dMP1
S100A9_ENSG00000163220	1.78E-50	1.576430209	0.71	0.508	4.47E-46	dMP1
LYZ_ENSG00000090382	5.00E-225	1.523372681	0.88	0.519	1.25E-220	dMP1
SOD2_ENSG00000112096	0.00E+00	1.500072568	0.921	0.546	0.00E+00	dMP1
FCN1_ENSG00000085265	3.91E-160	1.458258504	0.375	0.058	9.80E-156	dMP1
TIMP1_ENSG00000102265	1.53E-238	1.437338603	0.826	0.409	3.83E-234	dMP1
NFKBIA_ENSG00000100906	0.00E+00	1.403262666	0.982	0.868	0.00E+00	dMP1
DUSP2_ENSG00000158050	2.03E-304	1.318541401	0.839	0.368	5.08E-300	dMP1
C15orf48_ENSG00000166920	1.24E-162	1.229526871	0.637	0.256	3.11E-158	dMP1
AREG_ENSG00000109321	3.16E-144	1.188303254	0.511	0.16	7.92E-140	dMP1
IL1RN_ENSG00000136689	6.58E-206	1.166620815	0.568	0.146	1.65E-201	dMP1
PHLDA1_ENSG00000139289	4.11E-164	1.148256159	0.551	0.185	1.03E-159	dMP1
TNFAIP3_ENSG00000118503	1.47E-255	1.121535282	0.761	0.282	3.69E-251	dMP1
PLAUR_ENSG00000011422	1.40E-255	1.118230804	0.906	0.511	3.50E-251	dMP1
NAMPT_ENSG00000105835	2.58E-305	1.096437007	0.92	0.485	6.46E-301	dMP1
RP11-1143G9.4_ENSG00000257764	5.51E-89	1.088538764	0.462	0.198	1.38E-84	dMP1
IER3_ENSG00000137331	2.09E-228	1.084787063	0.934	0.74	5.24E-224	dMP1
GPR183_ENSG00000169508	6.98E-182	1.077153859	0.852	0.574	1.75E-177	dMP1
S100A12_ENSG00000163221	6.21E-85	1.022557225	0.175	0.011	1.56E-80	dMP1
CD44_ENSG00000026508	2.18E-274	1.02175185	0.87	0.413	5.47E-270	dMP1
RGCC_ENSG00000102760	2.86E-191	1.014011577	0.687	0.267	7.17E-187	dMP1
PTGS2_ENSG00000073756	4.08E-162	1.010919604	0.386	0.057	1.02E-157	dMP1
BTG1_ENSG00000133639	1.12E-239	1.005625189	0.958	0.753	2.81E-235	dMP1
SRGN_ENSG00000122862	0.00E+00	1.005442319	0.996	0.962	0.00E+00	dMP1
GPR34_ENSG00000171659	8.96E-175	-1.016302696	0.283	0.648	2.25E-170	dMP1
C1QB_ENSG00000173369	7.87E-257	-1.029139921	0.663	0.919	1.97E-252	dMP1
RNASE1_ENSG00000129538	2.81E-179	-1.033658013	0.732	0.936	7.04E-175	dMP1
MAF_ENSG00000178573	1.16E-176	-1.033965598	0.314	0.675	2.91E-172	dMP1
C1QC_ENSG00000159189	1.22E-283	-1.064561222	0.641	0.929	3.06E-279	dMP1
CCL2_ENSG00000108691	1.37E-63	-1.072853781	0.247	0.462	3.44E-59	dMP1
OLFML3_ENSG00000116774	1.53E-176	-1.091326187	0.108	0.49	3.84E-172	dMP1
C1QA_ENSG00000173372	1.81E-292	-1.131453679	0.7	0.923	4.53E-288	dMP1
C3_ENSG00000125730	1.85E-188	-1.198601433	0.177	0.577	4.64E-184	dMP1
FOLR2_ENSG00000165457	5.22E-261	-1.31045158	0.409	0.798	1.31E-256	dMP1
SLC40A1_ENSG00000138449	1.39E-244	-1.386420162	0.226	0.686	3.50E-240	dMP1
SEPP1_ENSG00000250722	1.60E-257	-1.577564412	0.452	0.831	4.01E-253	dMP1

Appendix 10 - Significantly overexpressed M1/M2 macrophage genes in the three maternal mononuclear phagocyte subsets (adjusted p < 0.05):

M1 gene ID/Ensembl ID	p value	log2(fold change)	pct.1	pct.2	adjusted p value	cluster
BCL2A1_ENSG00000140379	0	2.021036525	0.728	0.067	0	dMP1
CCL20_ENSG00000115009	0	1.741397017	0.276	0.029	0	dMP1
TNF_ENSG00000232810	0	1.177564342	0.511	0.094	0	dMP1
PFKFB3_ENSG00000170525	0	0.646374202	0.382	0.079	0	dMP1
BIRC3_ENSG00000023445	4.69E-98	0.308435396	0.265	0.107	1.18E-93	dMP1
SLC31A2_ENSG00000136867	1.09E-87	0.289786722	0.288	0.137	2.73E-83	dMP1
ATF3_ENSG00000162772	1.30E-73	0.374360434	0.624	0.458	3.25E-69	dMP1
IL2RA_ENSG00000134460	7.92E-284	0.382212434	0.141	0.017	1.99E-279	dMP2
TNF_ENSG00000232810	2.21E-116	0.467607038	0.269	0.107	5.54E-112	dMP2
SLC31A2_ENSG00000136867	3.35E-07	0.260884247	0.169	0.144	0.008396776	dMP2
BCL2A1_ENSG00000140379	0	0.700008122	0.66	0.095	0	pIMP
SLC31A2_ENSG00000136867	1.24E-138	0.351945611	0.581	0.14	3.11E-134	pIMP

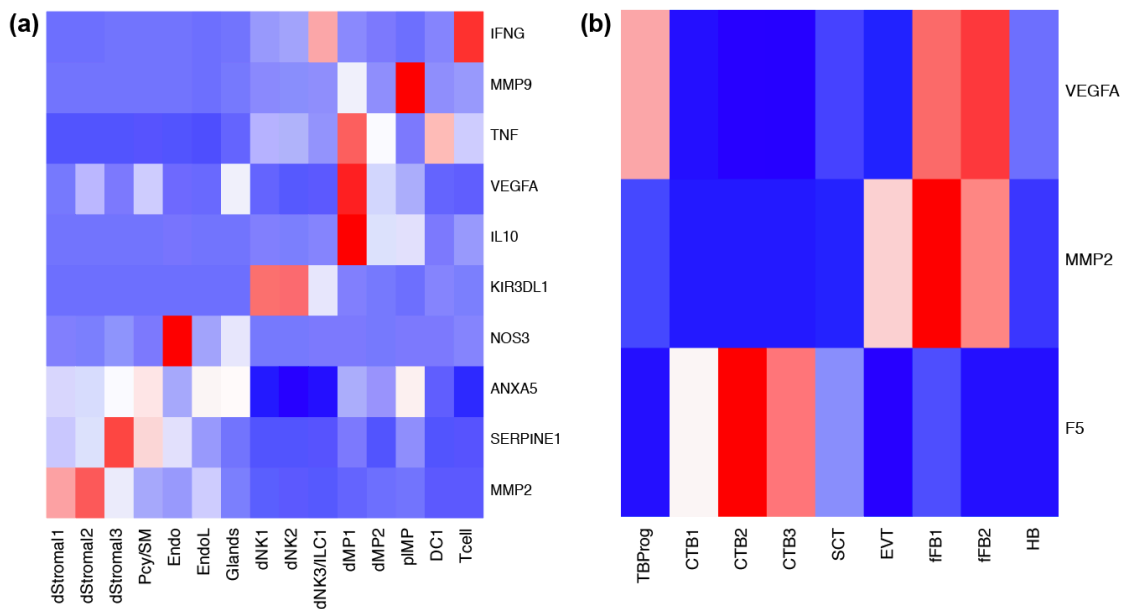| M2 gene ID/Ensembl ID	p value	log2(fold change)	pct.1	pct.2	adjusted p value	cluster
MS4A6A_ENSG00000110077	0	1.210012925	0.751	0.113	0	dMP1
MSR1_ENSG00000038945	0	1.12155835	0.519	0.056	0	dMP1
IL10_ENSG00000136634	0	0.844533592	0.328	0.017	0	dMP1
FGL2_ENSG00000127951	0	0.839205791	0.489	0.07	0	dMP1
MS4A4A_ENSG00000110079	0	0.670913055	0.452	0.081	0	dMP1
CD36_ENSG00000135218	0	0.533477331	0.363	0.083	0	dMP1
CXCR4_ENSG00000121966	0	0.416607417	0.759	0.246	0	dMP1
MRC1_ENSG00000260314	0	0.397008774	0.262	0.05	0	dMP1
EGR2_ENSG00000122877	2.93E-99	0.292030188	0.167	0.053	7.34E-95	dMP1
HEXB_ENSG00000049860	7.87E-89	0.316822005	0.59	0.425	1.97E-84	dMP1
LIPA_ENSG00000107798	1.50E-79	0.677431399	0.457	0.326	3.75E-75	dMP1
HNMT_ENSG00000150540	1.62E-79	0.351649267	0.48	0.328	4.07E-75	dMP1
LTA4H_ENSG00000111144	1.70E-42	0.345529694	0.327	0.226	4.26E-38	dMP1
MS4A6A_ENSG00000110077	0	2.239257868	0.94	0.101	0	dMP2
MS4A4A_ENSG00000110079	0	1.662923116	0.721	0.065	0	dMP2
MAF_ENSG00000178573	0	1.534114627	0.74	0.215	0	dMP2
MSR1_ENSG00000038945	0	1.157266276	0.507	0.056	0	dMP2
MRC1_ENSG00000260314	0	1.082199082	0.446	0.039	0	dMP2
FGL2_ENSG00000127951	0	0.712821403	0.353	0.077	0	dMP2
HNMT_ENSG00000150540	1.91E-199	0.834998024	0.526	0.325	4.80E-195	dMP2
EGR2_ENSG00000122877	2.06E-154	0.547309422	0.188	0.051	5.18E-150	dMP2
CTSC_ENSG00000109861	9.01E-144	0.577978086	0.749	0.703	2.26E-139	dMP2
SLC4A7_ENSG00000033867	2.03E-74	0.506406031	0.247	0.127	5.08E-70	dMP2
SLC38A6_ENSG00000139974	4.27E-31	0.307314869	0.135	0.072	1.07E-26	dMP2
IGF1_ENSG00000017427	1.20E-20	0.252426476	0.28	0.212	3.01E-16	dMP2
TGFBR2_ENSG00000163513	3.67E-15	0.320785075	0.192	0.146	9.20E-11	dMP2
CD36_ENSG00000135218	0	1.167271163	0.829	0.089	0	pIMP
MSR1_ENSG00000038945	0	0.96032345	0.748	0.073	0	pIMP
CCL18_ENSG00000275385	0	0.679249888	0.257	0.007	0	pIMP
MS4A4A_ENSG00000110079	0	0.62540035	0.75	0.093	0	pIMP
SLC38A6_ENSG00000139974	0	0.476221342	0.583	0.07	0	pIMP
LIPA_ENSG00000107798	2.09E-298	1.53167195	0.961	0.325	5.24E-294	pIMP
LTA4H_ENSG00000111144	2.49E-277	1.143042825	0.843	0.224	6.24E-273	pIMP
HS3ST1_ENSG00000002587	2.37E-259	0.320799147	0.359	0.035	5.96E-255	pIMP
MS4A6A_ENSG00000110077	5.72E-212	0.739019454	0.694	0.14	1.44E-207	pIMP
HEXB_ENSG00000049860	4.07E-134	0.648908959	0.931	0.428	1.02E-129	pIMP
FN1_ENSG00000115414	1.57E-127	0.703632729	0.861	0.365	3.94E-123	pIMP
HNMT_ENSG00000150540	2.29E-116	0.509051201	0.826	0.33	5.74E-112	pIMP

Appendix 11 - Heatmaps of cell type-specific expression pattern of genes associated with additional pregnancy complications and fertility-related conditions:
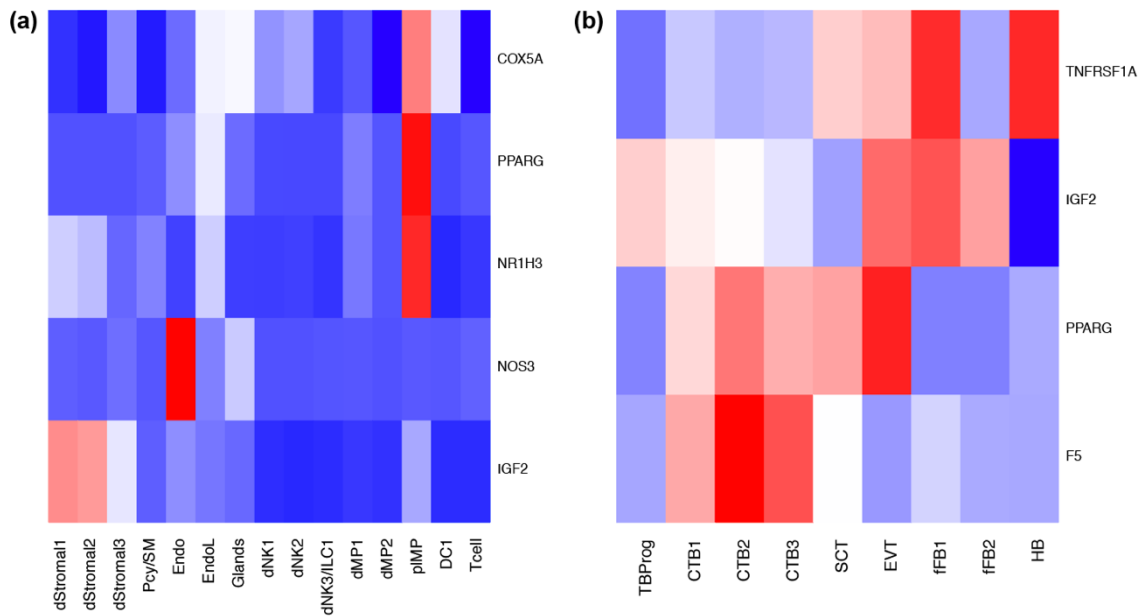
Preterm birth

(a) Maternally and **(b)** fetally expressed genes associated with preterm birth are upregulated in maternal smooth muscle and endothelial cells and maternal mononuclear phagocytes and in fetal trophoblasts, fibroblasts, and Hofbauer cells.
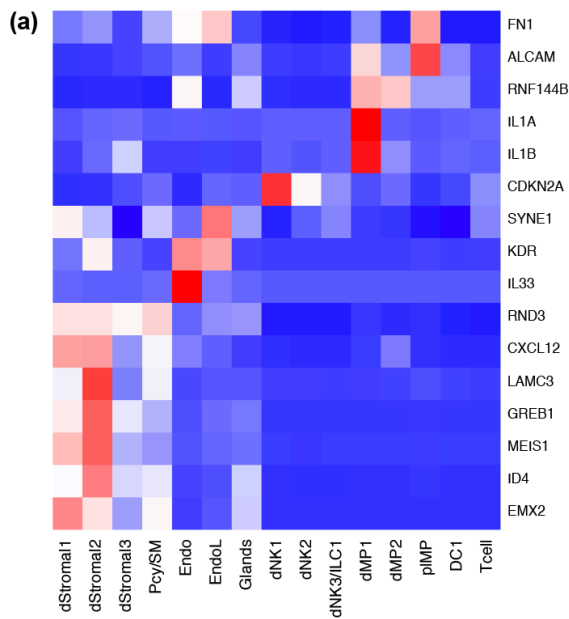
Recurrent miscarriage

(a) Maternally and **(b)** fetally expressed genes associated with recurrent miscarriage are upregulated in maternal stromal, dNK, and mononuclear phagocyte cells and in fetal trophoblasts and fibroblasts.
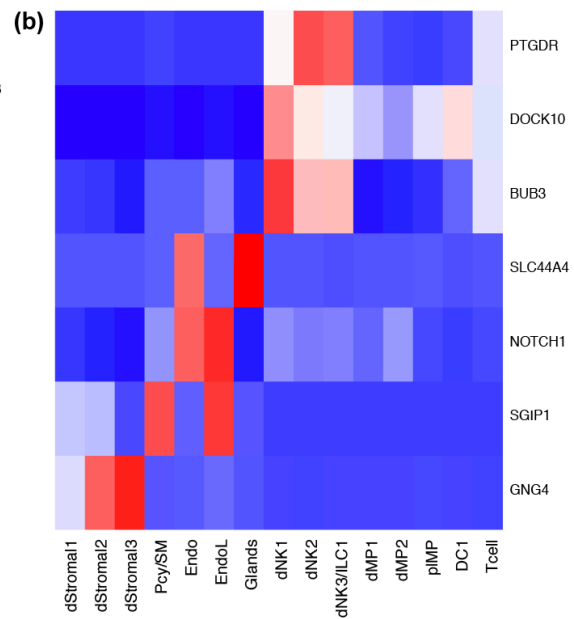
Placental abruption

(a) Maternally and **(b)** fetally expressed genes associated with placental abruption are upregulated in maternal stromal cell, endothelial cell, and placental mononuclear phagocyte populations and in fetal trophoblasts, fibroblasts, and Hofbauer cells.

Endometriosis/Ovarian disease   Age of menopause/menstrual onset

(a) Maternally expressed genes associated with endometriosis or ovarian disease are upregulated in maternal stromal cell, endothelial cell, and mononuclear phagocyte populations. **(b)** Maternally expressed genes associated with menopause and menstrual onset are upregulated in maternal stromal cell, endothelial cell, and dNK populations.