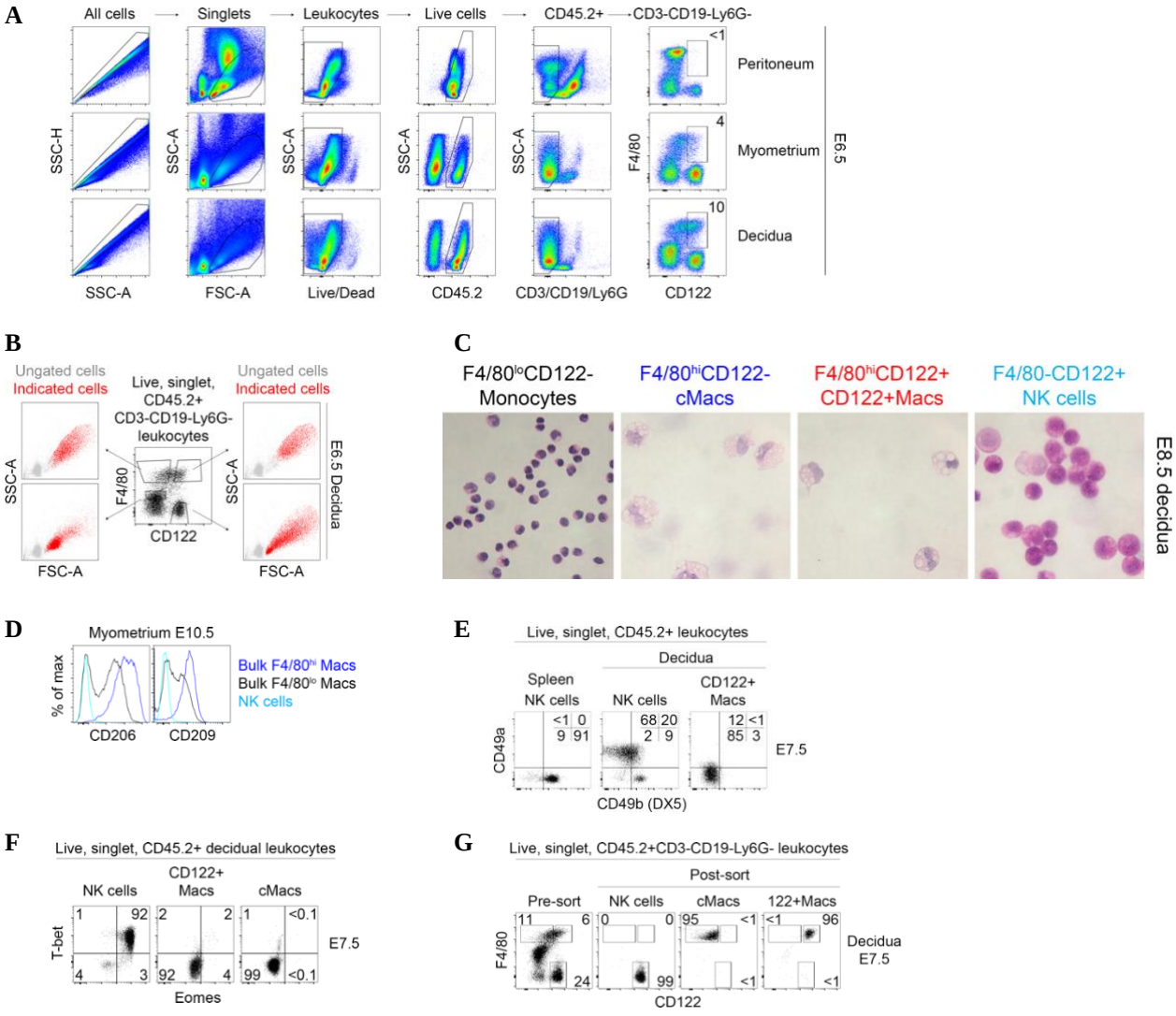
SUPPLEMENTAL FIGURE 1



Supplemental Figure 1. CD122+Macs are not NK cells, dendritic cells, or neutrophils. (A) Shown is the raw gating scheme used to identify murine CD122+Macs. Data are representative of at least 20 independent experiments. (B) Like cMacs (F4/80^{hi}CD122-), CD122+Macs (F4/80^{hi}CD122+) are among the largest cells in the decidua at E6.5 by flow cytometric analysis. (C) From left, decidual CD122-F4/80^{lo} cells at E8.5 are morphologically monocyte-like, all F4/80^{hi} cells are vacuolated and macrophage-like, and CD122+F4/80- cells are more finely granular and NK-like. Indicated cells were FACS-sorted and stained with hematoxylin and eosin. Data are representative of 2 independent experiments. (D) All myometrial F4/80^{hi}Macs, irrespective of CD122 status, express high levels of CD206 and CD209 (DC-SIGN) during gestation. We observed similar results in the decidua at E10.5, as well as similar results at other points throughout gestation. All events shown are live, singlet, CD3-CD19-Ly6G-CD45.2+ leukocytes, with NK cells F4/80-CD122+. Data are representative of at least 5 mice over 2 independent experiments. (E) Conventional splenic NK cells are CD49b/DX5+, decidual NK cells are largely CD49a+, and CD122+Macs express neither CD49a nor CD49b. Data are representative of 2-3 independent experiments with 2-3 mice per experiment. (F) Similarly, decidual NK cells express high levels of both T-bet and Eomes, while neither CD122+Macs nor cMacs express T-bet or Eomes. Data are representative of 2-3 independent experiments with 2-3 mice per experiment. (G) Shown is the sorting strategy to assess transcriptomes of purified decidual CD122+Macs, cMacs, and NK cells. Cells to be profiled by microarray were FACS-sorted to at least 95% purity from 3 independent groups of pooled E7.5 deciduae, with each group consisting of 4-5 mice.

SUPPLEMENTAL TABLE 1

Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val
C3ar1	302.56	8.29E-13	Gm6377	62.86	2.12E-11	Dsc2	0.1	1.25E-06	Gimap4	0.05	1.99E-10
Pf4	249.69	1.74E-12	C5ar1	61.92	6.28E-11	Satb1	0.1	3.46E-09	Srgap3	0.05	1.75E-10
C1qa	211.69	1.23E-10	Alox5ap	61.47	8.27E-11	Sidt1	0.1	2.37E-08	Zdhhc15	0.05	5.24E-11
C1qb	200.13	3.16E-10	Clec4n	56.67	2.00E-10	Pecam1	0.09	2.70E-09	Gzmb	0.05	2.80E-09
Ccl3	173.44	1.14E-10	Lst1	56.29	2.33E-10	Gpr141	0.09	4.61E-09	Cst7	0.05	9.70E-10
Ms4a7	171.44	1.62E-12	Apoe	56.07	3.11E-11	Gm40275	0.09	4.43E-09	Itga1	0.04	1.30E-09
C1qc	167.21	2.02E-12	Aif1	55.55	4.21E-11	Klrk1	0.09	8.97E-10	Gzmc	0.04	6.56E-10
Mrc1	159.25	3.09E-11	Tlr8	50.64	1.40E-11	Avil	0.09	9.29E-10	E330009J07Rik	0.04	1.60E-09
Ly86	158.62	3.40E-12	Wfdc17	50.59	9.21E-10	Khdc1a	0.08	3.74E-10	Sh2d1b2	0.04	8.38E-11
Fcgr4	157.7	1.06E-11	Ccl7	50.54	7.01E-11	Cd3g	0.08	1.95E-09	Ctsw	0.04	4.81E-11
Pld4	151.62	1.13E-11	Clec4a1	50.24	2.02E-11	Pglyrp1	0.08	6.18E-09	Klri2	0.04	3.11E-11
Lyz2	147.95	1.51E-10	Il1b	49.9	8.89E-11	Ifitm1	0.08	2.07E-09	Prf1	0.04	3.35E-09
Cbr2	144.5	4.39E-12	Cd74	49.5	5.81E-11	Serpinb9	0.08	1.71E-09	Klrb1b	0.03	5.68E-11
Ms4a6d	143.47	5.60E-12	Cd300c2	47.99	2.34E-10	I730030J21Rik	0.08	1.37E-08	Txk	0.03	1.00E-09
Ccl8	141.11	1.27E-10	Cd180	47.75	1.29E-10	Myb	0.08	1.53E-09	Car2	0.03	4.39E-11
Tlr7	112.9	1.16E-11	Cx3cr1	47.47	4.96E-10	Gimap7	0.07	3.22E-09	Eomes	0.03	6.07E-11
Cybb	108.59	3.11E-11	Csf1r	47.44	5.43E-10	Sult2b1	0.07	1.91E-08	Sytl2	0.03	1.65E-10
Ctsh	104.16	3.40E-12	Plbd1	46.96	1.13E-11	Tbx21	0.07	6.56E-10	Klrb1c	0.03	5.16E-10
Ifi27l2a	102.68	1.06E-11	Cd86	46.65	1.16E-11	Scin	0.07	2.03E-07	Klra5	0.03	1.50E-10
Ms4a6c	101.6	5.40E-12	Ms4a4c	46.59	4.47E-11	Klra21	0.07	2.59E-09	Gzma	0.03	1.51E-10
Sirpa	100.59	1.01E-10	Tlr2	46.54	2.48E-11	Sytl3	0.07	7.50E-10	Cd7	0.03	1.59E-10
Fcrls	100.1	3.40E-12	Fcgr2b	46.51	9.70E-10	Atp1b1	0.06	4.13E-06	Sh2d1a	0.03	8.89E-11
Ms4a14	100.03	5.40E-12	Ms4a4a	45.83	5.24E-09	Sla2	0.06	5.89E-07	Sh2d2a	0.03	5.97E-09
Ccl2	99.48	2.02E-12	Il18	45.27	3.15E-11	Samd3	0.06	8.21E-11	Thy1	0.02	7.62E-11
Mpeg1	98.61	1.25E-10	Ifit2	45.07	7.01E-11	Gzmd	0.06	1.37E-09	Gpr87	0.02	2.48E-11
Tlr1	94.76	4.31E-12	Slc15a3	44.62	1.28E-09	P2ry10	0.06	3.21E-08	Tnfrsf9	0.02	2.02E-11
Ifi207	91.95	4.12E-10	Cd33	44.02	3.26E-11	Ctsg	0.06	1.75E-09	Cd96	0.02	6.60E-12
Lgmn	86.64	1.33E-09	Apobec1	44	4.47E-11	Ptprcap	0.06	4.13E-09	Tmsb15a	0.02	1.40E-11
Fcgr1	86.31	3.40E-12	Ifngr2	43.35	2.40E-10	Zbtb32	0.06	1.97E-07	Mcpt8	0.02	1.37E-11
Ccl6	76.14	2.05E-11	Ifit3	42.46	2.02E-11	Ptpn3	0.06	1.85E-09	Ctla4	0.02	1.45E-10
Cxcl16	76.12	3.42E-11	H2-Aa	41.96	9.72E-12	Myo10	0.06	1.89E-09	Il2rb	0.02	6.56E-09
Cxcl2	74.25	5.60E-12	Gpr137b-ps	41.9	6.67E-12	Il2ra	0.05	1.48E-08	Xcl1	0.02	3.09E-11
Tlr13	73.81	5.60E-12	Hpgds	41.69	1.16E-11	Fasl	0.05	4.44E-11	Klrg1	0.02	5.43E-10
Blnk	72.14	5.60E-12	Spi1	40.74	3.42E-11	Gzmg	0.05	9.41E-09	Klre1	0.01	7.23E-12
Adgre1	68.94	1.89E-11	Egr2	37.33	1.45E-10	Icos	0.05	6.69E-10	Klrd1	0.01	5.13E-12
Dab2	64.81	4.24E-11	Oas2	36.75	6.52E-10	Lax1	0.05	3.49E-10	Nkg7	0.01	1.71E-11
P2ry6	63.89	1.27E-10	G530011O06Rik	36.73	1.86E-10	Clnk	0.05	3.53E-11	Ncr1	0.01	4.39E-12
P2rx4	63.22	1.13E-11	Gimap6	0.1	6.07E-09						

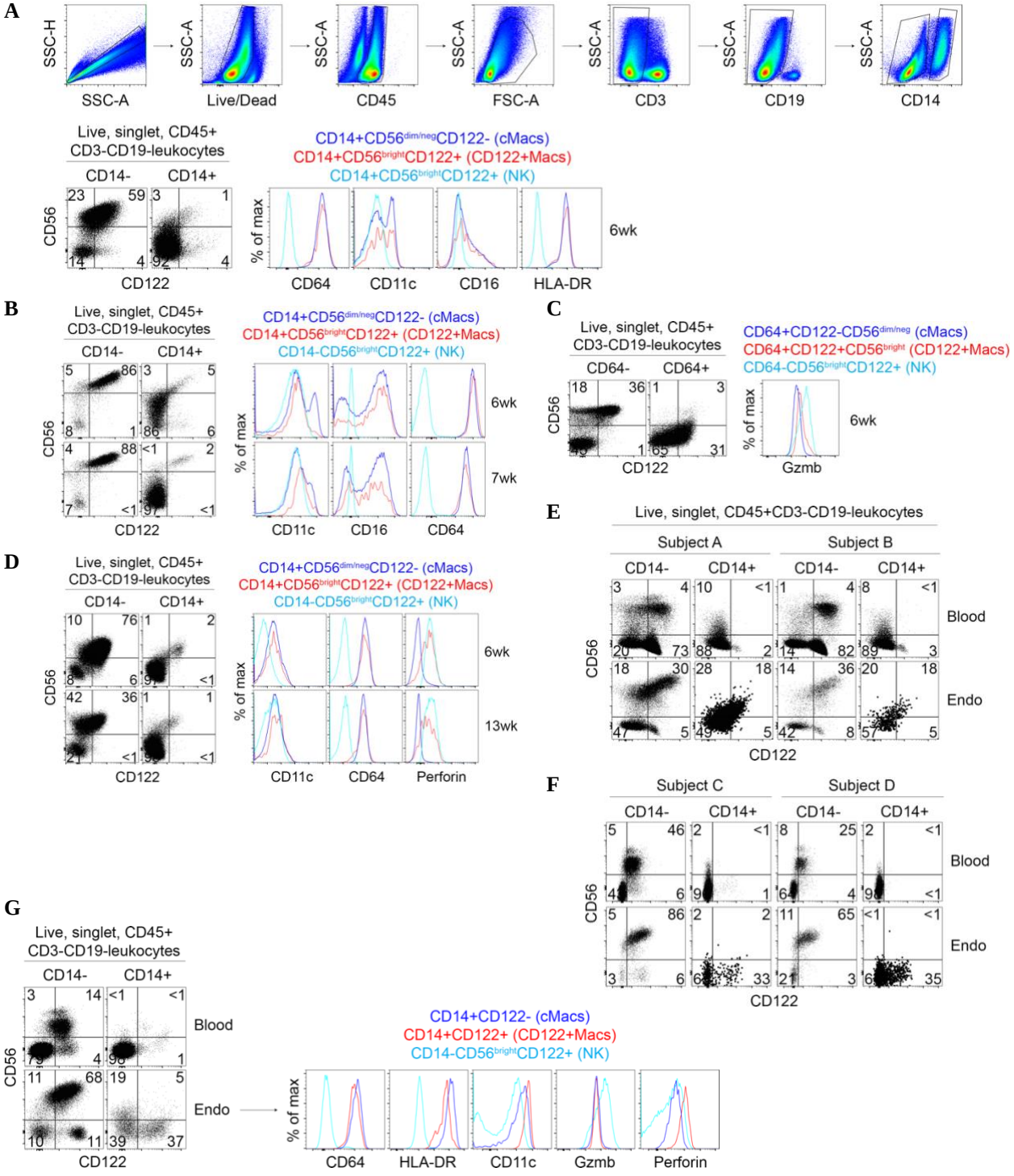
Supplemental Table 1. Macrophage-associated transcripts are abundant in decidual CD122+Macs, while killer lymphocyte transcripts are abundant in decidual NK cells. Changes in gene expression by microarray between sort-purified CD122+Macs and NK cells. Only the top 150 differentially expressed genes by fold change (75 enriched in CD122+Macs and 75 enriched in NK cells) with an adjusted p value <0.05 are shown. Absolute fold change of each individual gene refers to level in CD122+Macs relative to level in NK cells. Of note, *Il2rb* (encoding CD122) was highly enriched in NK cells despite modest to no difference in detection of surface CD122 by flow cytometry.

SUPPLEMENTAL TABLE 2

Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val	Gene symbol	Abs. FC	Adj. *p* val
Ccl8	4.16	5.75E-04	Gdf15	2.12	2.41E-03	Tgm2	1.74	1.55E-02	Oasl2	1.51	4.07E-02
Oas3	3.9	7.57E-04	Dhx58	2.12	6.95E-03	Tmsb15a	1.73	7.68E-03	Chst14	1.5	3.52E-02
Cfb	3.47	1.04E-04	Irgm1	2.09	1.81E-02	Fgl2	1.73	5.67E-03	Msmo1	1.5	3.40E-02
Ifi205	3.35	3.69E-04	Phfl1d	2.07	9.42E-03	H2-T24	1.72	2.66E-02	H2-Ab1	0.5	2.92E-02
Ifit2	3.22	3.06E-04	Ifi209	2.06	3.72E-03	Clcn7	1.71	1.50E-02	Timd4	0.5	5.03E-03
Mmp27	3.05	5.55E-03	Gm5431	2.05	3.51E-02	Gpr157	1.7	2.29E-02	Tmem119	0.48	1.82E-03
Zbp1	2.92	1.04E-04	Gzmg	2.04	3.42E-02	Il18	1.69	2.04E-02	Tdo2	0.48	2.41E-03
Irf7	2.9	2.77E-02	Ifi206	2.04	3.29E-03	Tent5c	1.69	2.94E-02	Clec4b1	0.47	3.87E-02
Gzmc	2.86	7.57E-04	BC147527	2.02	6.34E-03	Il1rn	1.69	5.55E-03	Igfbp7	0.47	6.34E-03
Oasl1	2.85	4.94E-04	Gm12250	2	1.73E-03	Gzma	1.68	4.40E-02	Tmem176a	0.47	2.41E-03
Gzmb	2.84	2.28E-03	Cbr2	1.98	3.20E-03	P2rx4	1.68	1.59E-02	Areg	0.47	2.55E-02
Ifit3b	2.82	1.30E-04	Gbp4	1.98	6.17E-03	Gbp3	1.67	1.75E-02	Cd74	0.46	3.67E-03
Ifi44	2.73	9.05E-04	Stat1	1.97	4.40E-02	Ifih1	1.67	8.33E-03	Plpp1	0.46	1.60E-02
Fabp5	2.72	4.94E-04	Gm1966	1.96	2.07E-02	Slfn5	1.67	2.05E-02	Fpr1	0.46	6.34E-03
Fabp3	2.68	4.93E-04	Phfl1c	1.95	3.72E-03	Fcgr4	1.67	4.25E-02	Sparcl1	0.45	6.59E-03
Slfn1	2.67	3.17E-03	Gbp9	1.95	2.41E-03	Fcgr1	1.66	6.34E-03	Slpi	0.45	3.94E-02
Spp1	2.66	5.52E-04	Slc9a7	1.95	7.76E-03	Ldlr	1.65	3.41E-02	Mfap5	0.45	2.41E-03
Ifi208	2.59	2.65E-03	Nkg7	1.92	7.07E-03	Lap3	1.64	3.73E-02	Efemp1	0.45	1.58E-02
Gzmd	2.51	1.87E-03	Clec10a	1.92	4.95E-02	P2ry14	1.63	4.33E-02	Tgfb2	0.44	6.59E-03
Cd300lf	2.48	5.63E-04	Treml2	1.9	5.67E-03	Zfp954	1.61	4.45E-02	Siglece	0.44	7.07E-03
Phfl1a	2.41	9.63E-03	Ddx58	1.89	2.43E-02	Scimp	1.61	3.42E-02	Cd24a	0.42	2.05E-02
Tnfsf10	2.4	2.47E-03	Ddx60	1.88	2.39E-02	Csf1	1.6	9.21E-03	Hpgd	0.41	6.34E-03
Rsad2	2.39	3.72E-03	Slfn2	1.88	2.87E-02	Slfn3	1.59	4.83E-02	H2-Eb1	0.4	3.57E-03
Hpse	2.36	4.51E-04	Msrb1	1.88	1.84E-02	Trim30d	1.59	8.69E-03	F5	0.4	9.12E-03
Ifit3	2.33	5.75E-04	Xdh	1.86	4.18E-02	Slc38a6	1.57	3.32E-02	Plxdc2	0.4	5.52E-04
Atp6v0d2	2.29	2.41E-03	Npl	1.86	1.14E-02	Csf2rb	1.57	4.09E-02	Retnla	0.38	7.82E-03
Cmpk2	2.24	2.28E-03	Lrp12	1.85	2.82E-03	Lgals8	1.57	1.38E-02	Vsig4	0.38	3.43E-04
Ms4a4c	2.23	2.41E-03	Ube2l6	1.85	1.13E-02	Renbp	1.55	4.40E-02	Selp	0.34	2.41E-03
Ifit1	2.23	4.69E-03	Gas2l3	1.81	3.85E-02	Cd22	1.55	4.40E-02	Fabp7	0.3	2.76E-03
Isg20	2.22	1.02E-03	Mx1	1.8	4.08E-03	Slfn8	1.55	2.30E-02	Fn1	0.27	5.52E-04
Nt5c3	2.21	6.75E-04	G530011O06Rik	1.8	2.88E-02	Il18bp	1.55	2.30E-02	Adgre4	0.23	2.36E-04
Gpnmb	2.17	2.64E-03	Parp11	1.79	8.69E-03	B430306N03Rik	1.54	1.38E-02	Serpinb10	0.23	1.78E-04
Gbp8	2.16	3.83E-03	Agtrap	1.79	2.60E-02	Tmem144	1.54	2.87E-02	Il6	0.18	3.25E-04
Cd200r4	2.16	1.65E-02	Papss2	1.78	1.43E-02	F13a1	1.54	3.55E-02	Serpinb2	0.1	1.04E-04
Pde7b	2.15	4.08E-03	Gbp5	1.78	5.44E-03	Pfkfb3	1.53	2.66E-02	Alox15	0.08	6.53E-06
Slfn4	2.14	3.79E-03	Tmem140	1.77	1.00E-02	Themis2	1.53	1.81E-02	Cxcl13	0.08	1.30E-04
Gbp7	2.14	4.18E-02	Stat2	1.77	1.35E-02	Dusp3	1.51	4.14E-02	Saa3	0.05	4.55E-06
Usp18	2.13	2.25E-03	Dtx3l	1.77	4.14E-02	Osbpl8	1.51	2.66E-02	Prg4	0.04	2.46E-05
Siglec1	2.13	1.66E-02	Nxpe5	1.76	1.95E-02						

Supplemental Table 2. Interferon-stimulated genes and cytolytic transcripts distinguish the transcriptome of decidual CD122+Macs from that of decidual cMacs. Changes in gene expression by microarray between sort-purified CD122+Macs and cMacs. Only those with an adjusted *p* value <0.05, absolute fold change of >1.5, or <0.5 are shown. Absolute fold change of each individual gene refers to level in CD122+Macs relative to level in cMacs. Of note, *Il2rb* (encoding CD122) met threshold unadjusted *p* value but did not meet threshold adjusted *p* value.

SUPPLEMENTAL FIGURE 2



Supplemental Figure 2. Human CD122+Macs are present in first trimester decidua and secretory phase endometrium during the implantation window. (A-D) Additional examples of human CD122+Macs in first-trimester deciduae analyzed after elective terminations of pregnancy. Shown in (A) is the raw gating scheme to identify human CD122+Macs. (E-G) Additional examples of human CD122+Macs in secretory phase endometrium. Like first-trimester decidual CD122+Macs, endometrial CD122+Macs variably express CD56. Up to two samples were sometimes processed simultaneously. Any samples stained and analyzed on the same day are shown in the same sub-figure, with headings to distinguish each individual subject from one another.