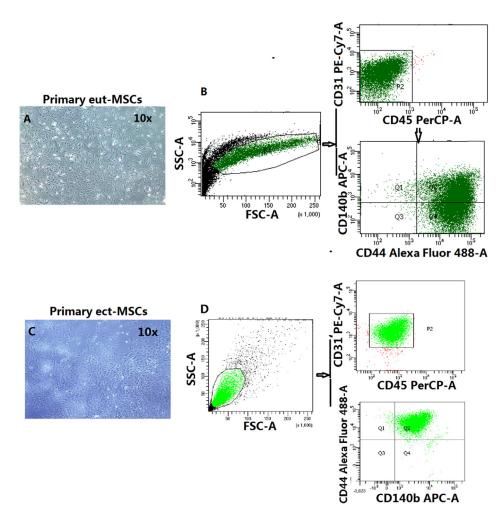
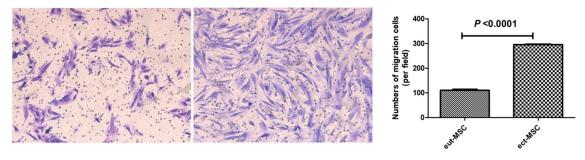


Supplementary Fig. S1. Morphology and characterization of eutopic and ectopic endometrium. (A) and (E) were HE staining which identified the eutopic and ectopic endometrium. The mouse anti-human CK7 antibody was utilized for grands staining of red signal as panels (B) and (F). The rabbit anti-human vimentin (green signal) for stromal staining as panels (C) and (G). Finally, antibodies signals merged with 4',6-diamidino-2-phenylindole staining as (D) and (H). Data are from representative experiment's picture (n=3 for eutopic-endometrium [EM] and ectopic-EM, respectively). Magnification: $40 \times$ in (A-H).



Supplementary Fig. S2. Morphology and characterization of mesenchymal stem cells (MSCs) derived from eutopic and ectopic endometrium. Fresh isolated MSCs derived from eutopic (A) and ectopic (C) endometrium stromal cells grew adherent. The stromal cells with CD45(-) & CD31(-) & CD44(+) were identified as eutopic MSCs (eut-MSCs) (B) and ectopic MSCs (ect-MSCs) (D). The panels was representative picture of ect-MSCs (n=6) and eut-MSCs (n=5).



Supplementary Fig. S3. Eutopic mesenchymal stem cells (eut-MSCs) and ectopic MSCs (ect-MSCs) display different migration potential, HE staining. eut-MSCs (left, magnifications 10x) performed significantly decreased migratory capacity compared to the ect-MSC (middle).