**Supplemental Table S6**. Gene expression microarray studies performed on decidualized human endometrial stromal fibroblasts (hESF).

Study	Type & duration of treatment	Type of hESF	Array Reference
Popovici RM, Kao LC, Giudice LC. Discovery of new inducible genes in in vitro decidualized human endometrial stromal cells using microarray technology. Endocrinology 2000; 141: 3510-3513.	10nM E2+1µM P4+20ng/ml EGF 10 days, <b>or</b> 1mM 8-Br cAMP 48hours	hESF; unknown endometriosis status	Clontech Broad Coverage Atlas Human cDNA Expression Array
Brar AK, Handwerger S, Kessler CA, Aronow BJ 2001 Gene induction and categorical reprogramming during in vitro human endometrial fibroblast decidualization. Physiol Genomics 7:135-148	10nM E2+1µM P4+ 0.05mM dibutyryl-cAMP; 2, 4, 6, 9, 12, 15 days	Human decidual fibroblasts	Incyte Genomics Human GEM-V
Tierney EP, Tulac S, Huang ST, Giudice LC 2003 Activation of the protein kinase A pathway in human endometrial stromal cells reveals sequential categorical gene regulation. Physiol Genomics 16:47-66	1mM 8-Br cAMP; 0, 2, 12, 24, 36, 48hours	hESF from hysterectomized patients with no endometrial dysfunction	Affymetrix Hu95A
Okada H, Nakajima T, Yoshimura T, Yasuda K, Kanzaki H. Microarray analysis of genes controlled by progesterone in human endometrial stromal cells in vitro. Gynecol Endocrinol 2003; 17: 271-280.	10 <sup>-6</sup> mol/l P4; 3 days	hESF; unknown endometriosis status	Human CHIP 1K set 1 (1000 gene cDNA platform)
White CA, Dimitriadis E, Sharkey AM, Salamonsen LA. Interleukin-11 inhibits expression of insulin-like growth factor binding protein-5 mRNA in decidualizing human endometrial stromal cells. Mol Hum Reprod 2005; 11(9):649-658.	10nM E2+100nM P4 ± IL-11; 12 days	hESF from hysterectomized patients with no endometrial dysfunction	Custom glass cDNA microarrays, Cambridge, UK
Takano M, Lu Z, Goto T, Fusi L, Higham J, Francis J, Withey A, Hardt J, Cloke B, Stavropoulou AV, Ishihara O, Lam EW, Unterman TG, Brosens JJ, Kim JJ. Transcriptional cross talk between the forkhead transcription factor forkhead box O1A and the progesterone receptor coordinates cell cycle regulation and differentiation in human endometrial stromal cells. Mol Endocrinol 2007; 21(10):2334-2349.	1μM P4+0.5mM 8-Br- ( <i>or</i> db-) cAMP; 72hours	hESF from hysterectomized patients with no endometrial dysfunction	Affymetrix Human U133-Plus 2.0

Lu Z, Hardt J, Kim JJ. Global analysis of genes regulated by HOXA10 in decidualization reveals a role in cell proliferation. Mol Hum Reprod 2008; 14(6):357- 366	36nM E2+1µM P4+ 0.1mM dibutyryl-cAMP± siHOXA10; 48hours	hESF from hysterectomized patients with no endometrial dysfunction	Affymetrix Human U133-Plus 2.0
Lebovic DI, Baldocchi RA, Mueller MD, Taylor RN. Altered expression of a cell-cycle suppressor gene, Tob- 1, in endometriotic cells by cDNA array analyses. Fertil Steril 2002; 78(4):849-854.	10 ng/mL IL-1β; 12hours	Ectopic lesion stromal cells &hESF from women <u>without</u> endometriosis	Atlas Human cDNA Expression Array, Clontech
Aghajanova L, Horcajadas JA, Weeks JL, Esteban FJ, Nezhat CN, Conti M, Giudice LC. The protein kinase A pathway-regulated transcriptome of endometrial stromal fibroblasts reveals compromised differentiation and persistent proliferative potential in endometriosis. Endocrinology 2010; 151: 1341-1355.	0.5mM 8-Br cAMP; 96hours	hESF from women <u>with</u> or <u>without</u> endometriosis	Affymetrix Gene 1.0 ST
Present study	10nM E2+1µM P4; 0, 6, 48hours, 14days	hESF from women <u>with</u> or <u>without</u> <u>endometriosis</u>	Affymetrix Gene 1.0 ST