

**Supplementary Table SII Antibody details.**

<b>Target</b>	<b>Host species</b>	<b>Clone</b>	<b>Antigen retrieval conditions</b>	<b>Dilution</b>	<b>Incubation time &amp; temperature</b>	<b>Supplier</b>
SSEA1	Mouse	MC-480	Tris-EDTA pH 9.0	1:800	4°C overnight	Biologend, London, UK
SOX2	Rabbit	D6D9	Citrate pH 6.0	1:50	4°C overnight	Cell Signalling Technology, Herts, UK
SOX9	Goat	N/A	Citrate pH 6.0	1:400	4°C overnight	Cell Signalling Technology, Herts, UK
Ki67	Mouse	MM1	Citrate pH 6.0	1:200	4°C overnight	Leica (Novocastra) Newcastle, UK
ER $\alpha$	Rabbit	N/A	Citrate pH 6.0	1:50	Room temperature, 2 h	Abcam, Cambridge, UK
ER $\beta$	Mouse	PPG5/10	Citrate pH 6.0	1:50	4°C overnight	Biorad (AbD Serotec) Kidlington, UK
PR	Mouse	PgR636	Citrate pH 6.0	1:1000	Room temperature, 30 min	DAKO (Agilent), Stockport, UK
Laminin	Rabbit	N/A	Proteinase K	1:800	4°C overnight	DAKO (Agilent), Stockport, UK
Cytokeratin 18	Mouse	DC10	Citrate pH 6.0	1:800	4°C overnight	DAKO (Agilent), Stockport, UK
$\beta$ -catenin	Rabbit	6B3	Citrate pH 6.0	1:200	4°C overnight	Cell Signalling Technology, Herts, UK
AR	Mouse	AF-441	Citrate pH 6.0	1:75	4°C overnight	DAKO (Agilent), Stockport, UK
MUC-1	Mouse	BC2	Citrate pH 6.0	1:100	4°C overnight	Biorad (AbD Serotec) Kidlington, UK

**Supplementary Table SIII Primers used for qPCR.**

Gene	qPCR primer sequence	Product Size (bp)	Annealing Temperature (°C)	Source
OCT4	F: 5'AGAACCGAGTGAGAGGCAA3' R: 5'CTCTCGTTGTGCATAGTCGC3'	176	56	In house
NANOG	F: 5'CGGAGACTGTCTCTCCTT3' R: 5'GTTCTTGCATCTGCTGGAGG3'	240	56	In house
SOX2	F: 5'CGAGATAAACATGGCAATCAAAT3' R: 5'AATTCAGCAAGAAGCCTCTCCTT3'	85	56	(Wong et al., 2010)
PODXL	F: 5'CCATCGTCTGCATGGCATCA3' R: 5'CTGTCTGCAGCTCCTCTGTT3'	114	56	In house
CD133	F: 5'TGCAACAGCATCAGATTGTC3' R: 5'TACCTGCTACGACAGTCGTG3'	199	56	In house
CD9	F: 5'GACACCTACAACAAGCTGAA3' R: 5'ACAGGACTTCACGGTGAAGG3'	165	56	In house
ER $\alpha$	F: 5'TGATTGGTCTCGTCTGGCG3' R: 5'CATGCCCTCTACACATTTCC3'	101	56	(Henderson et al., 2003)
PR	F: 5'CAGTGGGCGTTCCAAATGA3' R: 5'TGGTGAATCAACTGTATGTCTTGA3'	83	56	(Henderson et al., 2003)
FUT4	F: 5'CAGCTGGTTCGAGCGGTGAAGCCGCGCT3' R: 5'CAGAAAAACGTGAATCGGGAACAGTTGTGT3'	435	60	(Ponnampalam et al., 2008)
FUT3	F: 5'GCCGACCGCAAGGTGTAC3' R: 5'TGACTTAGGGTTGGACATGATATCC3'	75	60	(Higai et al., 2006)
SOX9	F: 5'GTACCCGCACTTGCACAAC 3' R: 5'TCTCGCTCTCGTTCAGAAGTC 3'	74	61	(Masuda et al., 2010)
YWHAZ	F: 5'CGTACTTGGCTGAGGTTGCC3' R: 5'GTATGCTTGGTGTGACTGATCGAC3'	69	56	(Marullo et al., 2010)

## References

Henderson TA, Saunders PT, Moffett-King A, Groome NP, Critchley HO. Steroid receptor expression in uterine natural killer cells. *The Journal of Clinical Endocrinology and Metabolism* 2003;88:440–449.

Higai K, Ishihara S, Matsumoto K. NFkappaB-p65 dependent transcriptional regulation of glycosyltransferases in human colon adenocarcinoma HT-29 by stimulation with tumour necrosis factor alpha. *Biological & Pharmaceutical Bulletin* 2006;29:2372–2377.

Marullo M, Zuccato C, Mariotti C, Lahiri N, Tabrizi SJ, Di Donato S, Cattaneo E. Expressed Alu repeats as a novel, reliable tool for

normalisation of real-time quantitative RT-PCR data. *Genome Biol* 2010;11.

Masuda H, Matsuzaki Y, Hiratsu E, Ono M, Nagashima T, Kajitani T, Arase T, Oda H, Uchida H, Asada H et al. Stem cell-like properties of the endometrial side population: implication in endometrial regeneration. *PLoS One* 2010;5: e10387.

Ponnampalam AP, Gargett CE, Rogers PA. Identification and hormonal regulation of a novel form of NKp30 in human endometrial epithelium. *Eur J Immunol* 2008;38:216–226.

Wong OG, Huo Z, Siu MK, Zhang H, Jiang L, Wong ES, Cheung AN. Hypermethylation of SOX2 Promoter in Endometrial Carcinogenesis. *Obstet Gynecol Int* 2010;2010.