

Table S4: Conserved transcription regulators in human and mouse ES cells. Genes with a & may act as transcriptional repressors or corepressors.

Function	Gene
Basic transcription machinery	BTF3, TAF1C, RRN3
Sequence dependent transcription factors	OCT4, SOX2, NANOG, UTF1, ZFP64, MTF2, ETV4, POU1F1, POU2F1, HESX1, E2F8 ^{&} , TGIF1 ^{&} , CTBP2 ^{&}
Chromatin modification	EED ^{&} , PHC1 ^{&} , SMARCD1, SUPT4H1 ^{&} , SUV39H1, MYST2, RUVBL1
DNA methylation	DNMT1 ^{&} , DNMT3B ^{&}
Histone acetylation	SAP30 ^{&} , MYST2