

**Table S4 Embryo cleavage rates and blastocysts formation rates in NANOG knockout and overexpression assays.**

Group	No. embryos (n=5)	No. cleaved (%)	Blastocyst (%)
<b>Control (Cas9 mRNA)</b>	306	220 ( $72.7 \pm 0.02$ )	91 ( $30.2 \pm 0.01$ )
<b>NANOG targeted</b>	312	211 ( $68.5 \pm 0.04$ )	85 ( $27.5 \pm 0.02$ )

Group	No. 4 cell stage embryos (n=6)	Blastocyst (%)
<b>Control (empty)</b>	310	61 ( $19.3 \pm 0.01$ )
<b>NANOG O.E</b>	327	62 ( $18.8 \pm 0.01$ )