**Table S1** Summary of the developmental rates and fluorescence performance after cytoplasmic injection (CPI)[1] in porcine parthenotes.

| Treatments[2] | No. of embryos cleaved to the 2–4-cell stages per total no. of parthenotes examined (average% ± SD) | No. of 2–4-cell embryos showing EGFP fluorescence per no. of 2–4-cell embryos showing RFD fluorescence (%) | No. of morulae/blastocysts per total no. of parthenotes examined (average% ± SD) | No. of morulae/blastocysts showing EGFP fluorescence per no. of morulae/blastocysts showing RFD fluorescence (average% ± SD) |
|---|---|---|---|---|
| Exp | 39/107 (33.1 ± 11.7)[b] | 6/29 (33.8 ± 44.9)[b] | 17/107 (15.7 ± 1.6)[b] | 9/15 (71.9 ± 32.9)[a] |
| Cont-1 | 63/99 (66.8 ± 12.5) | 3/21 (17.1 ± 23.6)[a] | 32/99 (30.1 ± 9.2) | 7/14 (50.0 ± 0.0) |
| Cont-2 | 80/142 (55.6 ± 16.6)[b] | 4/32 (45.8 ± 41.7)[b] | 32/142 (19.1 ± 13.5)[b] | 2/6 (20.8 ± 25.0)[b] |
| Cont-3 | 33/104 (35.7 ± 22.9)[b] | 12/28 (42.7 ± 33.4)[b] | 16/104 (17.4 ± 9.7)[b] | 4/14 (23.8 ± 20.6)[b] |
| Intact | 90/109 (81.2 ± 15.1)[a] | - | 44/109 (40.9 ± 22.7)[a] | - |

[1]CPI was performed on porcine parthenotes 6 h after activation. The treated embryos were then cultured for seven days to the blastocyst stage, when fluorescence was inspected on days 2 and 7 in culture. Some blastocysts showing both green and red fluorescence were subjected to molecular biological analysis to examine the possible chromosomal integration of the target gene (an *EGFP* expression unit).

[2]Samples were divided into four groups (Exp, Cont-1, Cont-2, and Cont-3). In Exp, CPI was performed using a solution containing *piggy*Bac (PB) transposase mRNA, pT-EGFP, and tetramethyl rhodamine-dextran 3 KDa (RFD). In Cont-1, CPI was performed using a solution containing transposase expression plasmid pTrans, pT-EGFP, and RFD. In Cont-2, CPI was performed using a solution containing pT-EGFP and RFD. In Cont-3, CPI was performed in a solution containing non-PB plasmid pCE-29 and RFD. "Intact" is an untreated control group.

[ab]Values with different superscripts within the same column are significantly different ($P < 0.05$).