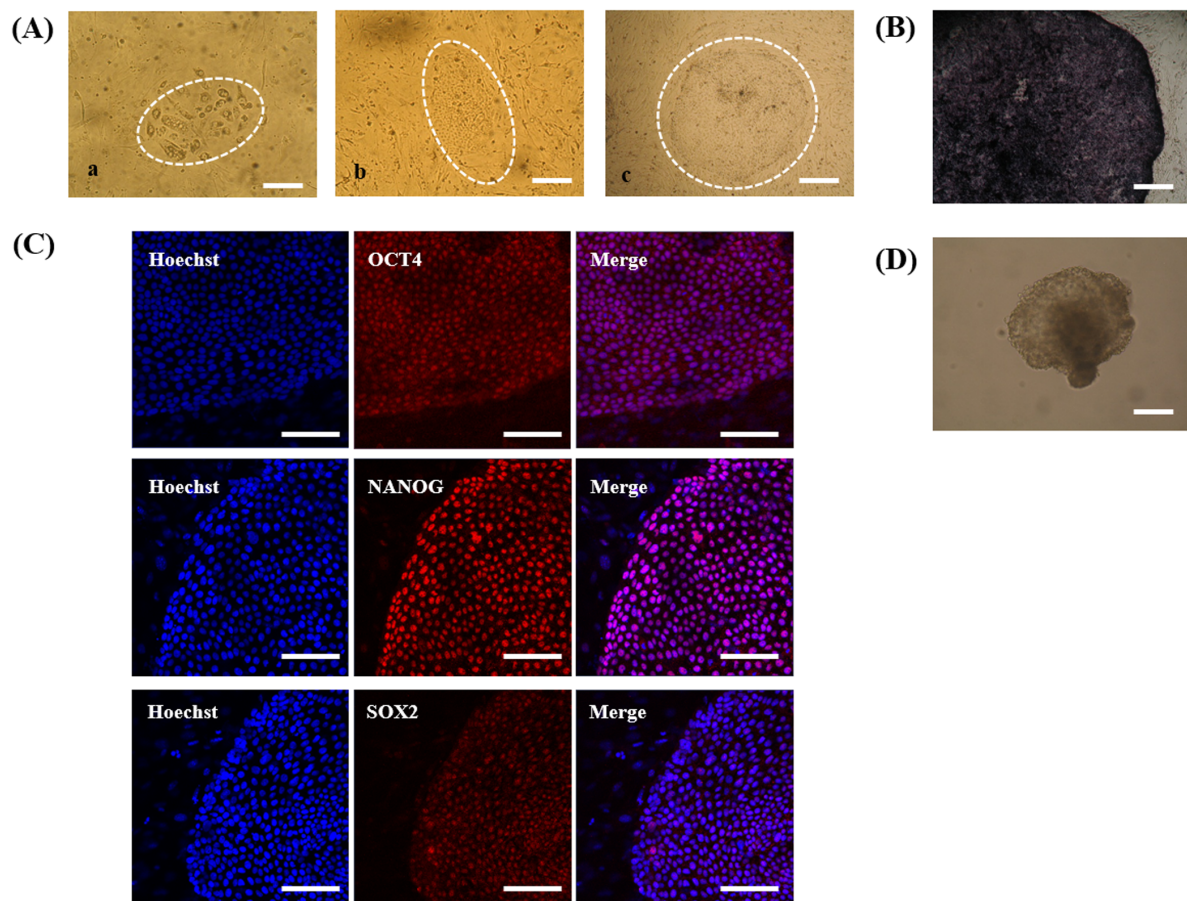


Supplementary Fig 1. Characterization of putative porcine embryonic stem cell (ESC) lines derived from IVF embryos treated Ge-132 during IVC. (A) Morphological changes during derivation of putative porcine ESCs, In two days after the seeding of blastocysts, giant cells originating from trophectoderm are attached on the feeder layer cells (a), morphology of primary colony derived from porcine embryo, day9, (b) Late morphology of ESC-like primary colony derived from porcine embryo day13 (c), Scale bars = 200 μ m. (B) alkaline phosphatase (AP) activity, Scale bars = 200 μ m; fixed cells were stained with a solution containing nitro blue tetrazolium chloride (NBT) and 5-bromo-4-chloro-3-indolyl phosphate toluidine salt (BCIP) stock solution (Roche, Basel, Switzerland) in a buffer solution for 30 min at room temperature. (C) The expression of pluripotent markers such as OCT4, NANOG and SOX2 in porcine pluripotent cell lines by immunofluorescence analysis, Scale bars = 100 μ m; All of the cell lines displayed the clear expression of key pluripotent markers, nuclearly localized OCT4 (AB19857, Abcam, Cambridge, UK, 1:200), NANOG (AB70482, Abcam, 1:200), and SOX2 (AB5603, Millipore, 1:200), whereas these markers were not expressed in differentiated cells (MEFs). Stained cells were examined using a confocal microscope (LSM700, Carl Zeiss, Oberkochen, Germany) and ZEN 2009 Light Edition software (Carl Zeiss). (D) representative free-floating embryoid bodies (EB) derived from putative porcine embryonic stem cell lines through culture via the hanging drop method for 5 days, Scale bars =100 μ m.



Supplementary Table 1. Effect of Ge-132 during IVC on the derivation efficiency of putative porcine embryonic stem cell (ESC) lines

Concentration ($\mu\text{g/ml}$)	No. of blastocysts		No. of primary outgrowths, n (%)	No. of cell lines, n (%)
	Plated	Attached, n (%)*		
0	15	9 (60.0%)	-	0
100	16	13 (75.0%)	3 (18.8%)	1 (6.3%)
200	16	13 (75.0%)	1 (6.3%)	1 (6.3%)
400	15	11 (73.3%)	1 (6.7%)	0

*The attachment efficiency of the primary cultures was determined by scoring the number of attached colonies after 48 h.