

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: The process of NT-IVF and the development of SH embryos.

MII oocytes were secured with a holding pipette and the zona pellucida was drilled with a laser. An enucleation pipette was inserted into the cytoplasm, and a small amount of cytoplasm containing the spindle was removed from the oocyte. Next, an HVJ-E extract-treated donor cell was aspirated into a micropipette and transferred into the enucleated oocyte. The time-lapse video was taken under polarized light microscopy using Oosight™ software displaying the pseudo-meiotic-like spindle development following the nuclear transfer of a cumulus cell into an enucleated oocyte. The full development of preimplantation SH-embryo generated by NT-ICSI was observed using a time-lapse imaging system.

File name: Supplementary Data 1

Description: The source data for generating the graphs and charts are shown in the main figures.

File name: Supplementary Data 2

Description: Nuclear variants of FVB/N, C57BL/6, and DBA/2 mice, and SH-embryos by whole-exome sequencing.

The exome data were aligned to the C57BL/6 genome sequence reference (GCF_000000055.19, GRCm38.p6). 0/1 and 1/1 indicate heterozygosity and homozygosity of altered SNPs, respectively. The data could include errors due to the sequencing process.

File name: Supplementary Data 3

Description: Genotyping of intact IVF embryos and SH-embryos by Miseq.

Red letters in sheet 1 could be the extrusion of two-pair of chromatids into the unseparated chromosomes into PPBs in NT-IVF embryos. The blue letters in sheet 1 could be errors of whole genome amplification. Asterisk indicates the genotype by Sanger sequencing in sheet 1. N/A could be no extraction of unseparated chromosomes or errors of whole genome amplification in sheet 1.