Title: Supplementary Data 1.

Description: MYBPC3 genotypes in individual blastomeres of injected embryos.

Large deletions (del \geq 100 bp) are highlighted in red; ins represents insertion; del represents deletion; sub represents substitution.

Title: Supplementary Data 2.

Description: *LDLRAP1* genotypes in blastomeres of edited and control embryos. Control blastomeres with LOH are highlighted in yellow.

Title: Supplementary Data 3.

Description: *MYH7* **genotype in individual blastomeres of control non-injected embryos.** Control blastomeres with LOH are highlighted in yellow.

Title: Supplementary Data 4.

Description: MYH7 genotype in individual blastomeres of injected embryos.

Large deletions (del \geq 100 bp) are highlighted in red; ins represents insertion; del represents deletion; sub represents substitution.

Title: Supplementary Data 5.

Description: Sample-specific ADO rates in DNA after WGA.

Title: Supplementary Data 6.

Description: Locus-specific ADO rates in single cell DNA after WGA.

Title: Supplementary Data 7.

Description: Preimplantation development of CRISPR/Cas9 injected embryos.

Title: Supplementary Data 8.

Description: *MYBPC3* and *MYH7* genotypes in ESC subclones derived from edited embryos. Cell lines with large deletions are highlighted in yellow.

Title: Supplementary Data 9.

Description: Genome variants and LOH at *MYBPC3* **locus in ESC clones.** Green represents homozygous regions, red represents loss of paternal variants; yellow highlighted loci represent informative genomic variants; n/a - not applicable.