The Maternal Effect Genes UTX and JMJD3 Play Contrasting Roles in *Mus musculus* Preimplantation Embryo Development

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Supplement figure：

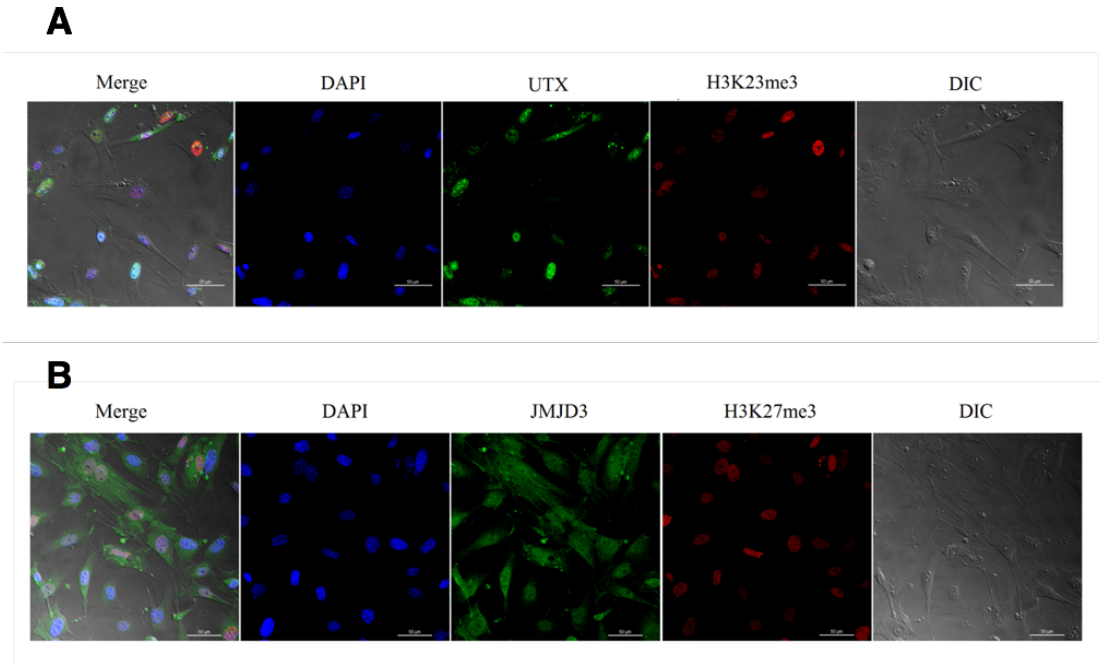

Figure s1. Immunostaining analysis for UTX (**A**) or JMJD3 (**B**) in mouse embryonic fibroblast cell. *Scale bar*, 50 μm.

Supplement movie：

To detect embryo quality by means of Oct4 promoter-driven GFP, we injected control-siRNA (Supplementary Movie1) or siRNA-JMJD3 (Supplementary Movie2) into OG2 (Oct4-GFP transgenic) parthenogenetic embryos and imaged via live-cell workstation. Compared with the control group, the GFP fluorescence signals significantly enhanced in the oocytes injected with JMJD3 siRNA.