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## Generation of high quality iPS cells (super iPS cells) using linker histone H1foo

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Embryonic Stem Cells (ESCs) are a hallmark of ideal pluripotent stem cells. Epigenetic reprogramming of induced pluripotent stem cells (iPSCs) has not been fully accomplished. iPSC generation is similar to somatic cell nuclear transfer (SCNT) in oocytes, and this procedure can be used to generate ESCs (SCNT-ESCs), which suggests the contribution of oocyte-specific constituents. Here, we show that the mammalian oocyte-specific linker histone H1foo has beneficial effects on iPSC generation. Induction of H1foo with Oct4, Sox2, and Klf4 significantly enhanced the efficiency of iPSC generation. H1foo promoted *in vitro* differentiation characteristics with low heterogeneity in iPSCs. H1foo enhanced the generation of germline-competent chimeric mice from iPSCs in a manner similar to that for ESCs. These findings indicate that H1foo contributes to the generation of higher-quality iPSCs.

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