

Supplementary information, Figure S8 Sunitinib promotes factor-mediated reprogramming of MEFs.

(A) PCR analysis of integration of exogenous genes in indicated iPSC clones induced by 1-4 transcription factors plus sunitinib. (B)&(C) qRT-PCR analysis of the expression of pluripotency genes (B) and the silence of exogenous genes (C) in indicated iPSC clones induced by 1-4 transcription factors plus sunitinib. MEFs and MEFs infected with 4F for 4 days (MEF-4F (D4)) were used as controls. Data are mean \pm SEM (n=3). (D) Top: morphology, GFP expression and AP staining of iPSC clone (2F-6) induced with 2F plus sunitinib (1 μ M) (Scale bar: 50 μ m). Middle and bottom: immunofluorescent staining of SSEA-1 (middle) and Nanog (bottom) in clone 2F-6 (Scale bar: 10 μ m). (E) DNA methylation profile of the Nanog and Oct4 proximal promoter in MEF, E14, and iPSC clone induced by Oct4 and sunitinib (1F-1). (F) A chimeric mouse produced with iPSC clone 2F-6. (G) Western blot evaluation of the knockdown efficiency of VEGFR1 and VEGFR2 (left panel). VEGFR1 or VEGFR2 knockdown enhanced iPSC generation relative to scrambled shRNA (control, right panel). Data are mean \pm SEM (n=3), ***p < 0.001vscontrol.