

Supplementary information, Figure S3. Further Characterization of NSC-CiPSCs and IEC-CiPSCs. Related to Figure 4. (A) Sample distance matrix of global gene expression profiles of NSCs, IECs, mESCs (R1), CiPSCs derived from NSCs and IECs (clone NSC-CiPSC-1, NSC-CiPSC-2, NSC-CiPSC-3, IEC-CiPSC-10, and IEC-CiPSC-13). Cells are distanced by similarity in expression level of all sampled transcripts and the distance is

used for clustering. Similarity between samples are colored from low to high by white to blue. (B) Bisulfite genomic sequencing of *Oct4* and *Nanog* promoter region in NSC-CiPSCs and IEC-CiPSCs (clone NSC-CiPSC-3 and IEC-CiPSC-13). (C) Growth curves of CiPSCs. NSC-CiPSC-2 from passage 7, NSC-CiPSC-3 from passage 7, IEC-CiPSC-4 from passage 10 and IEC-CiPSC-10 from passage 7. (D) Typical karyotypes of CiPSCs derived from NSCs, IECs and p*Villin*-Cre-tdTomato-positive IEC (clone NSC-CiPSC-3, IEC-CiPSC-13 and IEC-CiPSC-4). (E) Immunofluorescence analysis of pluripotent markers expression in CiPSC colonies derived from p*Villin*-Cre-tdTomato-positive IECs. For (E), scale bars, 100 µm.