

Supplementary information, Figure S5 DNA fingerprinting to confirm the authenticity of iPSCs as compared to their somatic cell origins.

Genomic DNAs isolated from various iPSC lines and their parental cells such as cord blood (CB), bone marrow (BM) CD34+ cells and MSCs, and adult peripheral blood (PB) mononuclear cells (MNCs). They were used as templates for detection of variable regions (in size) in the genome by PCR using two sets of specific primers from Invitrogen. The PCR fragments were separated by agarose electrophoresis with size markers (in bp). Based on the results using two sets of primers, derived iPSC showed DNA fingerprints similar to their parental cells, but distinct to other IPSC lines of different origins or two human ESC lines (H1 and H9) we used at the time. For iPSC lines derived from PB MNCs of a sickle cell disease patient (SCD003), we also confirmed that they contain a homozygous mutation at the condon 6 of the beta-globin gene (by DNA PCR and sequencing).