

**SUPPLEMENTARY FIG. S5.** Overview of the 50 most differentially expressed genes in iMSC#3 compared with primary hMSCs. Shows the relative expression (fold change) in iMSC#3 cells relative to the average expression in hMSCs from both donors based on genome-wide expression profiling. Negative values indicate downregulation. Error bars represent the difference in expression (standard deviation) between the two donors. GAGE, G antigen; ELN, elastin; MAGE, melanoma antigen family; KRT18, keratin 18 pseudogene; GPR116, G protein-coupled receptor 116; RELN, reelin; ACTC1, actin alpha cardiac muscle 1; ANKRD30A, ankyrin repeat domain 30A; ADAM19, ADAM metallopeptidase domain 19: SLC7A5, solute carrier family 7 member 5; RPL36AP49, ribosomal protein L36a pseudogene 49; KCNG1, potassium voltage-gated channel subfamily G member 1; TSPAN13, tetraspanin 13; KRT, keratin; HAS2, hyaluronan synthase 2; WNT5A, wingless-related MMTV integration site 5A; EYA2, eyes absent homolog 2; TMEM200A, transmembrane protein 200A; DUSP6, dual specificity phosphatase 6; TGM2, transglutaminase 2; RNA28S5, RNA, 28S ribosomal 5; CYBA, cytochrome b-245 alpha polypeptide; FST, follistatin; HAPLN1, hyaluronan and proteoglycan link protein 1; CHCHD10, coiled-coil-helix-coiled-coil-helix domain containing 10; ANGPTL4, angiopoietin-like 4; MALL, mal T-cell differentiation protein-like; APCDD1L, adenomatosis polyposis coli downregulated 1-like; UCHL1, ubiquitin carboxyl-terminal esterase L1; NDN, necdin melanoma antigen family member; PENK, proenkephalin and ISLR, immunoglobulin superfamily containing leucine-rich repeat.