



Figure Legend. Hutchinson-Gilford Progeria induced-pluripotent stem cell line HGFDFN168 iPS1P exhibits characteristics of pluripotency. (A-D) HGFDFN168 iPS1P cells express markers for pluripotency, Tra-1-6-, Tra-1-81, SSEA4, and alkaline phosphatase. (E-G') In vitro differentiation of HGFDFN168 iPS1P cells shows that it has the capacity to differentiate to cells of all 3-germ layers, βIII-tubulin (ectoderm), smooth-muscle actin (mesoderm), Gata4 (endoderm). (H) In vivo differentiation of HGFDFN168 iPS1P cells shows that it has the capacity to differentiate to tissues of all 3-germ layers, pigmented epithelium (ectoderm), cartilage (mesoderm), Gut-like epithelium (endoderm) (I-I') HGFDFN168 iPS1P cells exhibit repressed Lamin A/C expression in undifferentiated cells but detectable expression in differentiated cells at the border of the colony. (J) The HGFDFN168 iPS1P cell line exhibits normal karyotype.