

Figure Legend. Hutchinson-Gilford Progeria induced-pluripotent stem cell line HGADFN167 iPS1J exhibits characteristics of pluripotency. (A-D) HGADFN167 iPS1J cells express markers for pluripotency, SSEA4, Tra-1-81, Tra-1-60, and alkaline phosphatase. (E-G') In vitro differentiation of HGADFN167 iPS1J cells shows that it has the capacity to differentiate to cells of all 3-germ layers, β III-tubulin (ectoderm), smooth-muscle actin (mesoderm), AFP (endoderm). (H-H') HGADFN167 iPS1J cells exhibit repressed Lamin A/C expression in undifferentiated cells but detectable expression in differentiated cells at the border of the colony. (I) Karyotypic analysis of HGAD-FN167 iPS1J revealed normal karyotype (95%), with a single cell exhibiting trisomy 20.