

Figure S1. A; Schematic representation of CRISPR/Cas9 gRNA editing sites in exon 1 of *Supt16*. B; Western blot and quantification of Spt16 protein level in hNSCs (n = 3). Data are means \pm standard deviation of three independent experiments. C; Representative images of human neural stem cells.

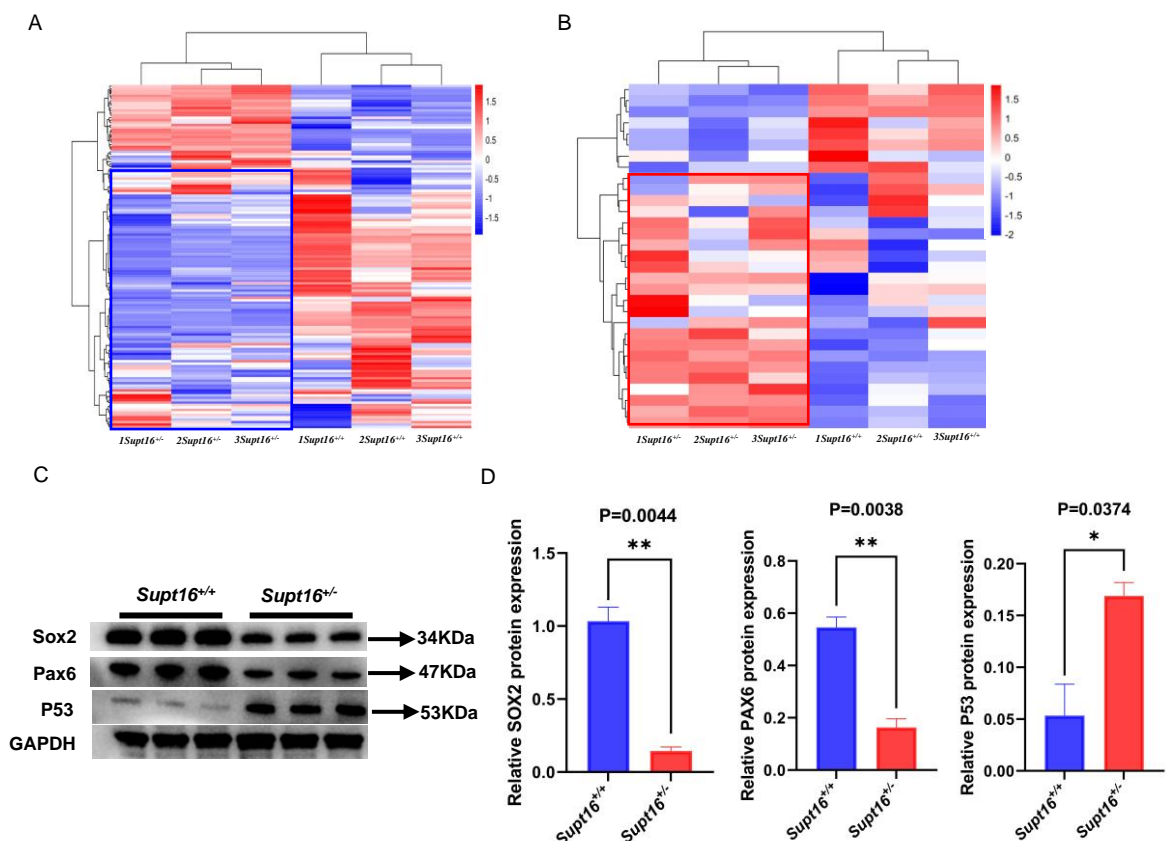


Figure S2. A; Heatmap showing differential expression genes of mTOR signaling pathway enriched in GSEA analysis. B; Heatmap showing autophagy-related differential expression genes analyzed by GSEA. C and D; Western blot and quantification of PAX6, SOX2 and P53 protein level in hNSCs (n = 3). Data are means \pm standard deviation of three independent experiments.

A

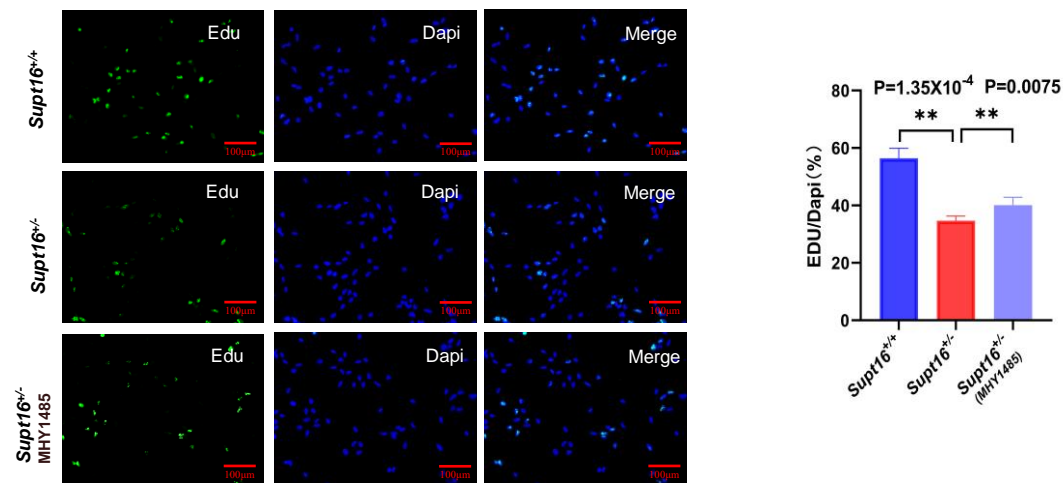


Figure S3. A; Representative images and quantification of EDU (green) immunofluorescence staining in hNSCs treated with different treatments. And MHY1485 treatment rescued the inhibitory effect of *Sup16* haploinsufficiency on the proliferation of hNSCs.

A

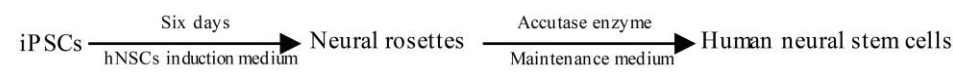


Figure S4. A; Schematic diagram of the human neural stem cell differentiation process.