

**Supplemental Figure 2.** (**A**) After RSC sphere passaging, secondary sphere numbers showed no significant differences (\*p>0.05). This result suggests that CHX10 works primarily on retinal progenitor and not retinal stem cells. (**B**) Results of the in vitro differentiation assay with hRSC colonies transfected with CHX10 (Left), or CHX10VP16 (Right) -expressing lentiviral vectors after neomycin selection. Neomycin selection was performed 3 days after virus infection. Panels show fluorescent images using anti-NESTIN antibody (red) and anti-PAX6 antibody (green). PAX6/NESTIN double labeling indicates undifferentiated retinal cells. With CHX10 transduction, most of hRSC progeny maintained an undifferentiated state. In contrast, CHX10VP16 transduction significantly decreased the number of undifferentiated cells.