



**SUPPLEMENTARY FIG. S5.** Human-ESC-derived cortical cells at 24 days of differentiation. **(A)** Human-ESC-derived cells showed several features of early cortical progenitors. **(a)** All cells were immunoreactive for cortical progenitor markers BLBP and Nestin. **(b)** All cells were immunoreactive for cortical progenitor markers PAX6 and Nestin, with some heterogeneity of staining intensity. **(c)** Only a minority of cells were TUJ1-positive neurons (see **B** for the quantitation). **(d)** There were no cells positive for Oct4, which is a marker of pluripotent stem cells. All cells were immunoreactive for a human nuclei (hNuc) antibody. **(e)** Few cells were stained with a phospho-vimentin (pVim) antibody, which is a marker of mitotic cortical progenitors. No cells were immunoreactive for TBR2, which is a marker of basal progenitors. Note that strong Hoechst-positive dots are the remnants of dead cells. **(B)** Quantitation of cell fates of neural-induced human ESCs at 24 days of differentiation. Percentages of PAX6- and TUJ1-expressing cells are indicated.