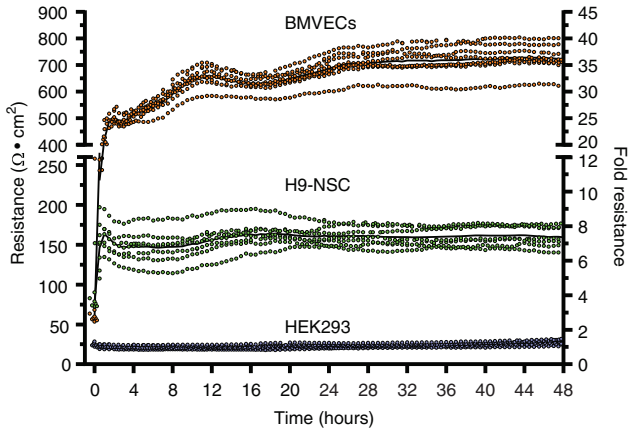

SUPPLEMENTARY FIG. S2. H9-NSCs generate high TEER values. The expression of TJPs on H9-NSCs suggests the possible assembly of intercellular tight junction complexes. Adding support for the above is the imaging analysis (Fig. 3 and Supplementary Fig. S1), which shows that the expression of some of the TJPs localize to the membrane, which makes it probable that tight junction complexes are forming. One analytical approach in which tight junctions are often evaluated is through their resistance (in ohms) profile by Electric Cell-substrate Impedance Sensing or ECIS®. Of note, the measurement of impedance or resistance values in barrier forming cells is commonly referred to as Trans- Endothelial (or Epithelial) Electrical Resistance or TEER. Therefore, using the ECIS Z-theta 96-well array station (coupled to 96W1E+PET electrode multiwell plates) from Applied Biophysics, Inc., added cells attach to the microelectrodes and acted as insulators increasing the resistance of the system. Input of a low-frequency current is impeded in a manner related to the cell attachment and configuration. The AC frequency used will follow the path of least resistance, particularly between adjacent cells (ie, paracellularly). To compare the relative intercellular tightness between adjacent cells, the resistance was measured on monolayers of H9-NSCs, brain microvascular endothelial cells, and HEK293 cells. Measurements were acquired continuously at 4,000 Hz at 30-min intervals. The data are presented as both $\Omega \cdot cm^2$ (plotted on the *left* *y*-axis) and as the fold resistance (plotted on the *right* *y*-axis). The fold resistance was calculated from the raw resistance (in ohms) values and divided by those acquired in the HEK293 cells. Plots from the individual wells ($n=6$) are shown for each cell type (the average is shown as a *black line* within each cell type grouping).