

Supplementary Materials

Table 1. Cell culture media compositions utilized for neural induction and differentiation.

I. Neural induction of hiPSC	II. Neural differentiation	III. Proliferation
	Basic medium for all steps: DMEM high glucose/Ham's F12 (2:1 ratio, #31966-021/#31765-027, Gibco), 1 x penicillin/streptomycin (PAN- Biotech), ta	
1 x N2 Supplement (Gibco), 1 x B27 supplement (Gibco), 20% (v/v) Knockout serum replacement (#10828028, Gibco), 16 ng/mL EGF, 20 μ M TGF- β RI kinase inhibitor VI (SB-431542, #616461), 0.5 μ M BMP receptor antagonist (LDN-193189, #SML0559, both Sigma-Aldrich, St. Louis, USA). [+/- ROCK-inhibitor +/- human FGF – see explanation in main text]	1 x N2 Supplement (Gibco), for hiNPC only supplemented with: 1 x B27 supplement (Gibco), 100 U/mL Interferon- γ , 20 ng/mL neurotrophin-3 (both PeproTech, Germany), 300 μ M dibutyryl-cAMP, 20 μ M ascorbic acid, 5 mM creatine monohydrate (all Sigma Aldrich, St. Louis, USA)	1 x B27 supplement (Gibco), 20 ng/mL human recombinant epidermal growth factor EGF (#PHG0313, Gibco), for hNPC/hiNPC only supplemented with: human recombinant FGF (# 233-FB, 20 ng/mL, R&D Systems),