

Table S1 Cell culture media and buffer composition

hESC Media		
	KO DMEM/F-12	Thermo Fisher Scientific
15%	Knockout Serum Replacement (KSR)	Thermo Fisher Scientific
2 mmol/L	L-Glutamine	Thermo Fisher Scientific
1×	MEM Non-Essential Amino Acids Solution (MEM-NEAA)	Thermo Fisher Scientific
0.5%	Penicillin-Streptomycin	Thermo Fisher Scientific
100 µmol/L	β-2 Mercaptoethanol	Sigma-Aldrich
10 ng/mL	Human Recombinant Basic Fibroblast Growth Factor-2 (bFGF)	Thermo Fisher Scientific

EB Media		
	KO DMEM/F-12	Thermo Fisher Scientific
15%	Knockout Serum Replacement (KSR)	Thermo Fisher Scientific
2 mmol/L	L-Glutamine	Thermo Fisher Scientific
1×	MEM Non-Essential Amino Acids Solution (MEM-NEAA)	Thermo Fisher Scientific
0.5%	Penicillin-Streptomycin	Thermo Fisher Scientific
100 µmol/L	β-2 Mercaptoethanol	Sigma-Aldrich

NSC Media		
	DMEM/F12	Corning
2 mmol/L	L-Glutamine	Thermo Fisher Scientific
1×	MEM Non-Essential Amino Acids Solution (MEM-NEAA)	Thermo Fisher Scientific
0.5%	Penicillin-Streptomycin	Thermo Fisher Scientific
0.5×	N2 Media Supplement	Thermo Fisher Scientific
0.5×	B27 Media Supplement	Thermo Fisher Scientific
20 ng/mL	Human Recombinant Basic Fibroblast Growth Factor-2 (bFGF)	Thermo Fisher Scientific

Neuron Differentiation Media		
	DMEM/F12	Thermo Fisher Scientific

2 mmol/L	L-Glutamine	Thermo Fisher Scientific
1×	MEM Non-Essential Amino Acids Solution (MEM-NEAA)	Thermo Fisher Scientific
0.5%	Penicillin-Streptomycin	Thermo Fisher Scientific
0.5×	N2 Media Supplement	Thermo Fisher Scientific
0.5×	B27 Media Supplement	Thermo Fisher Scientific
10ng/ml	Recombinant Human BDNF	PeproTech
10ng/ml	Recombinant Human GDNF	PeproTech
0.5M	cAMP	Sigma-Aldrich

Astrocyte differentiation media		
	DMEM-Glutamax	Thermo Fisher Scientific
10%	FBS	Thermo Fisher Scientific
0.4%	N2 Media Supplement	Thermo Fisher Scientific

Cell Culture Coating and Dilutions		
1:4 in Sterile Water	Poly-L-Ornithine	Sigma-Aldrich
1:200 in PBS	Laminin (1mg/ml)	Sigma-Aldrich

FACS Buffer		
	PBS	Thermo Fisher Scientific
2%	FBS	Thermo Fisher Scientific
1%	EDTA	Thermo Fisher Scientific

FACS Blocking Buffer		
	FACS Buffer	
10%	Mouse Serum	Sigma-Aldrich