

Component	EC	NSC	EC/NSC	Supplier	Cat. Ref.
DMEM:F12		Basal medium	Basal medium (half volume)	Sigma-Aldrich	D6421
EBM-2	Basal medium		Basal medium (half volume)	Lonza	CC-3156
Fetal bovine serum	5%			PAA	A15-151
Hydrocortisone	1.4 $\mu$ M		0.7 $\mu$ M	Sigma-Aldrich	H-0135
Acid ascorbic	5 $\mu$ g/ml		2.5 $\mu$ g/ml	Sigma-Aldrich	A4544
Chemically defined lipid concentrate	1%		0.5%	Invitrogen	11905-031
HEPES	10 mM		5 mM	Sigma-Aldrich	83264
Penicillin/ Streptomycin	1%		0.5%	Invitrogen	15140-122
Human albumin solution			0.03%	0.015%	GemBio
Transferrin, human		100 $\mu$ g/ml	50 $\mu$ g/ml	Sigma-Aldrich	T1147
Putrescine DiHCl		16.2 $\mu$ g/ml	8.1 $\mu$ g/ml	Sigma-Aldrich	P5780
Insulin, human		5 $\mu$ g/ml	2.5 $\mu$ g/ml	Sigma-Aldrich	I9278
Progesterone		60 ng/ml	30 ng/ml	Sigma-Aldrich	P8783
L-glutamine		2 mM	1 mM	Sigma-Aldrich	G7513
Sodium selenite		40 ng/ml	20 ng/ml	Sigma-Aldrich	S9133
L-thyroxine (T4)		400 ng/ml	200 ng/ml	Sigma-Aldrich	T0397
Tri-iodo-thyronine (T3)		337 ng/ml	118.5 ng/ml	Sigma-Aldrich	T6397
Heparin sodium		10 Units/ml	5 Units/ml	Sigma-Aldrich	H3149
Corticosterone		40 ng/ml	20 ng/ml	Sigma-Aldrich	C2505
*bFGF		10 ng/ml		PeptoTech	AF-100-18B
*EGF		20 ng/ml		PeptoTech	AF-100-15
*4-hydroxytamoxifen		100 nM		Sigma-Aldrich	H7904

**Table S1. Composition of culture media.** Composition of the cell culture media for growing the D3 human cerebral microvascular endothelial cell (hCMEC) line, the STROC05 human neural stem cell (hNSC) line, and the hCMEC/hNSC coculture. Factors with a \* were removed to induce cell differentiation.