

Materials List for:

Direct Induction of Human Neural Stem Cells from Peripheral Blood Hematopoietic Progenitor Cells

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Materials

Name	Company	Catalog Number	Comments
Lymphocyte separation medium	Lonza	17-829E	1x
SepMate	Stemcell Technologies	15415	15 ml
Human serum	Invitrogen	34005-100	
Antibiotics	Gibco	15240-062	1%
CD34 MultiSort Kit	Miltenyi Biotec	130-056-701	
EDTA	Cellgro	46-034-CI	2 mM
MACS LS column	Miltenyi Biotec	130-042-401	
StemSpan SFEM medium	Stemcell Technologies	9650	1x
IMDM	Quality Biologicals	112-035-101	1x
TPO	Peprtech	300-18	100 ng/ml
Flt-3	Peprtech	300-19	100 ng/ml
SCF	Peprtech	300-07	100 ng/ml
IL-6	Peprtech	200-06	20 ng/ml
IL-7	Peprtech	200-07	20 ng/ml
IPS Sendai Reprogramming Kit	Life Technologies	A1378001	
Cell scraper	Sarstedt	83.183	
DMSO	Sigma	D2650	
CryoTube vials	Thermo	368632	
Mr. Frosty container	Thermo	5100-0001	
DMEM/F12	Life Technologies	12400-024	1x
N2 supplement	Life Technologies	17502-048	1x
Bovine serum albumin	Sigma	A2934	0.1% (w/v)
bFGF	Peprtech	100-18B	20 ng/ml
EGF	Peprtech	AF-100-15	
B27 supplement	Life Technologies	17504-044	1x
NSC serum free medium	Life Technologies	A1050901	1x
Poly-D-lysine/laminin coated cover slips	BD Bioscences	354087	
cAMP	Sigma	A9501	300 ng/ml
Vitamin C	Sigma	A0278	0.2 mM
BDNF	Peprtech	450-02	10 ng/ml
GDNF	Peprtech	450-10	10 ng/ml
Poly-L-ornithine	Sigma	P4957	1x

PDGF-AA	Peprtech	100-13A	10 ng/ml
NT-3	Peprtech	450-03	2 ng/ml
Shh	Peprtech	1314-SH/CF	2 ng/ml
T3	Sigma	T6397	3 nM
PFA	Sigma	P6148	4%
PBS	Quality Biological	119-069-101	1x
Goat serum	Sigma	G9023	4%
TritonX-100	Sigma	T9284	
Mouse monoclonal anti-Nestin	Millipore	AB5922	1:1,000 dilution
Anti-SOX2 antibody	Applied Stemcell	ASA0120	Ready to use
Mouse anti- β III-tubulin antibody	Promega	G712A	1:1,000 dilution
Rabbit anti-GFAP antibody	Sigma	G4546	1:100 dilution
Anti-O4 antibody	R&D Systems	MAB1326	IgM; 1 ng/ml
Alexa Fluor 594 goat anti-rabbit antibody	Life technologies	A11012	1:400 dilution
Alexa Fluor 488 goat anti-mouse antibody	Life technologies	A11001	1:400 dilution
Alexa Fluor 488 goat anti-mouse IgM antibody	Life technologies	A21042	1:250 dilution
DAPI	Sigma	D9542	1 μ g/ml