

Materials List for:

Generation of Standardized and Reproducible Forebrain-type Cerebral Organoids from Human Induced Pluripotent Stem Cells

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Materials

Name	Company	Catalog Number	Comments
A83-01	StemGent	130-106-274	500 nM
B27 Supplement	Gibco	17504-044	1 to 100
Basement membrane extract (e.g. Geltrex)	Gibco	A14132-02	
Cyclic adenosine monophosphate (cAMP)	Sigma-Aldrich	A9501	0.15 µg/mL
Cell-dissociation reagent (TrypLE Express)	Gibco	12605028	
Counting chamber e.g. Fuchs-Rosenthal	Karl Hecht	40449001	
D-Glucose	Carl Roth	HN06.3	0.2 mg/mL
DMEM-F12 L-Glutamin	Gibco	11320033	
Embedding molds (Tissue-Tek Cryomold)	Sakura Finetek	4565	
Ethylenediaminetetraacetic acid	Sigma-Aldrich	E6511	0.5 mM
Gelatin	Sigma-Aldrich	G1890	
Heparin	Sigma-Aldrich	H3149-25KU	10 µg/mL
Inhibitor of WNT response (IWR-1)	Enzo Life Science	BML-WN103-0005	10 µg/mL
Insulin	Sigma-Aldrich	91077C	2.5 µg/mL
IPSC medium for monolayer cultures (Pluripro)	Cell Guidance Systems	MK01	
L-alanyl-L-glutamine (GlutaMax)	Gibco	35050038	1%
Low-adhesion 6 cm plates	Labomedic	2081646L	
Low-adhesion 10 cm plates	Labomedic	2081646O	
LDN-193189	Miltenyi Biotec	130-104-171	180 nM
N2 Supplement	Gibco	17502-048	1 to 200
Non-essential amino acids	Gibco	11140035	0.50%
Paraformaldehyde	Sigma-Aldrich	P6148	4.00%
Phosphate buffered saline (PBS)	Gibco	14190144	
Plastic paraffin film (Parafilm)	BRAND GMBH + CO KG	701606	
ROCK inhibitor Y-27632	Cell Guidance Systems	SM02-100	5 µM or 50 µM
Sucrose	Sigma-Aldrich	S7903	
Tubes 15 mL	Corning Life Sciences	734-0451	

Microscope Slides e.g. Superfrost Plus Microscope Slides	Thermo Scientific	4951PLUS4	
Tissue culture 6 well plate	Falcon	734-0019	
Tissue culture 24 well plate	Falcon	734-0949	
Trypan blue stain	Gibco	15250-061	
Ultra-low-binding 96 well lipidure-coat plate A-U96	Amsbio	AMS.51011610	
Antibodies			
Sox2	R&D Systems	MAB2018	
Pax6	Covance	PRB-278P-100	
Otx2	R&D Systems	ab9566	
Emx1	Sigma	HPA006421	
N-cadherin	BD	610921	
ZO-1	Life Tech	61-7300	
P-Vimentin	Biozol	D076-3	
Tpx2	Novus Biologicals	NB500-179	
Acetylated α -tubulin	NEB/CS	5335	
Alexa488 anti ms	Invitrogen	A11001	
Alexa488 anti rb	Invitrogen	A11008	
Alexa555 anti ms	Invitrogen	A21424	
Alexa555 anti rb	Invitrogen	A21429	