

Materials List for:

# Isolation and Expansion of Neurospheres from Postnatal (P1–3) Mouse Neurogenic Niches

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URL: <https://www.jove.com/video/60822>

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## Materials

Name	Company	Catalog Number	Comments
0.05% Trypsin-EDTA (1X)	Gibco	25300-054	
0.4% Trypan Blue solution	Sigma-Aldrich	T8154-20ML	
12mm Glass coverslips	VWR	631-1577	
15mL Centrifuge Tube	Corning	430791	
5-bromo-2'-deoxyuridine	Sigma-Aldrich	B9285-1G	
50 mL Centrifuge Tube	Corning	430829	
70% Ethanol	Manuel Vieira & C <sup>a</sup> (Irmão) Sucrs, Lda	UN1170	
Adhesion slides, Menzel Gläser, SuperFrost Plus	VWR	631-9483	
Alexa Fluor 488 donkey anti-chicken IgG (H+L)	Life Technologies	A11039	
Alexa Fluor 488 donkey anti-rabbit IgG (H+L)	Life Technologies	A21206	
Alexa Fluor 488 donkey anti-rat IgG (H+L)	Life Technologies	A21208	
Alexa Fluor 568 donkey anti-mouse IgG (H+L)	Life Technologies	A10037	
Alexa Fluor 568 donkey anti-rabbit IgG (H+L)	Life Technologies	A10042	
Alexa Fluor 647 goat anti-mouse IgG (H+L)	Life Technologies	A21235	
Anti-5-Bromo-2-Deoxyuridine	Dako	M0744	
Anti-CD140a (PDGFRα) (rat)	BD Biosciences	558774	Dilute at a ratio 1:500.
Anti-Chondroitin Sulphate Proteoglycan NG2 (rabbit)	Merck Milipore	AB5320	Dilute at a ratio 1:200.
Anti-Doublecortin (rabbit)	Abcam	ab18723	Dilute at a ratio 1:200.
Anti-Doublecortin (chicken)	Synaptic Systems	326006	Dilute at a ratio 1:500.
Anti-Glial Fibrillary Acidic Protein (rabbit)	Sigma-Aldrich	G9269-.2ML	Dilute at a ratio 1:1000.
Anti-Myelin Basic Protein (rabbit)	Cell Signalling Technology	78896S	Dilute at a ratio 1:200.
Anti-Nestin (mouse)	Merck Milipore	MAB353	Dilute at a ratio 1:200.
Anti-Neuronal Nuclei (mouse)	Merck Milipore	MAB377	Use 6% BSA in PBS 1X. Dilute at a ratio 1:400.
Anti-SOX2 (rabbit)	Abcam	ab97959	Dilute at a ratio 1:500.

Anti-Tubulin $\beta$ 3 (rabbit)	BioLegend	802001	Dilute at a ratio 1:200.
Axiovert 200 wide field microscope	ZEISS		
B-27 Supplement (50X), serum free	ThermoFisher	17504044	
Boric Acid	Sigma-Aldrich	B6768-500g	
Bovine Serum Albumin	NZYTEch	MB04602	
Cell counting chamber, Neubauer	Hirschmann	8100104	
Cell culture CO <sub>2</sub> incubator	ESCO	CCL-170B-8	
Corning Costar TC-Treated 24 Multiple Well Plate	Corning	CLS3524-100EA	
di-Sodium hydrogen phosphate dihydrate	Merck Milipore	1.06580.1000	
DMEM/F-12, GlutaMAX Supplement	ThermoFisher	31331028	
Dumont #5 - Fine Forceps	FST	11254-20	
Dumont #5S Forceps	FST	11252-00	
Dumont #7 Forceps	FST	11272-30	
Epidermal growth factor	ThermoFisher	53003018	
Fibroblast growth factor	ThermoFisher	13256029	
Filter papers	Whatman	1001-055	
Fine Scissors - Sharp	FST	14060-09	
Gillete Platinum 5 blades	Gillette		
HBSS, no calcium, no magnesium	ThermoFisher	14175053	
Hoechst 33342	Invitrogen	1399	
Hydrochloric acid	Merck Milipore	1.09057.1000 (1L)	
Labculture Class II Biological Safety Cabinet	ESCO	2012-65727	
Laminin	Sigma-Aldrich	L2020	
McILWAIN Tissue Chopper	The Mickle Laboratory Engineering CO. LTD.	MTC/2	Set to 450 $\mu$ m
Micro Spatula - 12 cm	FST	10091-12	
Micro tube 0.5 mL	SARSTEDT	72.699	
Micro tube 1.5 mL	SARSTEDT	72.690.001	
Micro tube 2.0 mL	SARSTEDT	72.691	
NeuroCult Chemical Dissociation Kit (Mouse)	Stem Cell	5707	
Olympus microscope SZ51	Olympus	SZ51	
Paraformaldehyde, powder	VWR	28794.295	
Penicillin-Streptomycin	ThermoFisher	15140122	
Petri dishes 60 mm	Corning	430166	
Phosphate standard solutions, PO <sub>4</sub> <sup>3-</sup> - in water	BDH ARISTAR	452232C	
Poly-D-Lysine 100mg	Sigma-Aldrich	P7886	
Poly-L-ornithine solution	Sigma-Aldrich	P4957	
Potassium chloride	Sigma-Aldrich	P5405-250g	
Propidium iodide	Sigma-Aldrich	P4170-25MG	
Sodium chloride	VWR	27800.360.5K	
Sodium Hydroxide	Merck Milipore	535C549998	

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Triton X-100	BDH	14630	
VWR INCU-Line IL10	VWR	390-0384	