

# Culture of Neurospheres Derived from the Neurogenic Niches in Adult Prairie Voles

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jove.com/video/61402

## Materials

Name	Company	Catalog Number	Comments
<b>Antibodies</b>			<b>Antibody ID</b>
Anti-Nestin	GeneTex	GTX30671	RRID:AB_625325
Anti-Doublecortin	MERCK	AB2253	RRID:AB_1586992
Anti-Ki67	Abcam	ab66155	RRID:AB_1140752
Anti-MAP2	GeneTex	GTX50810	RRID:AB_11170769
Anti-GFAP	SIGMA	G3893	RRID:AB_477010
Goat Anti-Mouse Alexa Fluor 488	Thermo Fisher Scientific	A-11029	RRID:AB_2534088
Goat Anti-Rabbit Alexa Fluor 568	Thermo Fisher Scientific	A-11036	RRID:AB_10563566
Goat Anti-Guinea Pig Alexa Fluor 488	Thermo Fisher Scientific	A-11073	RRID:AB_2534117
<b>Culture reagents</b>			
Antibiotic-Antimycotic	Thermo Fisher Scientific/Gibco	15240062	100X
B-27 supplement	Thermo Fisher Scientific/Gibco	17504044	50X
Collagenase, Type IV	Thermo Fisher Scientific/Gibco	17104019	Powder
Dispase	Thermo Fisher Scientific/Gibco	17105041	Powder
DMEM/F12, HEPES	Thermo Fisher Scientific/Gibco	11330032	
Glucose	any brand		Powder, Cell Culture Grade
GlutaMAX	Thermo Fisher Scientific/Gibco	35050061	100X
HEPES	any brand		Powder, Cell Culture Grade
Mouse Laminin	Corning	354232	1 mg/mL
N-2 supplement	Thermo Fisher Scientific/Gibco	17502048	100X
NAHCO <sub>3</sub>	any brand		Powder, Suitable for Cell Culture
Neurobasal	Thermo Fisher Scientific/Gibco	21103049	
Phosphate-Buffered Saline (PBS)	Thermo Fisher Scientific/Gibco	10010023	1X
Poly-L-ornithine hydrobromide	Sigma-Aldrich	P3655	Powder

Recombinant Human EGF	Peprtech	AF-100-15	
Recombinant Human FGF-basic	Peprtech	AF-100-18B	
StemPro Accutase Cell Dissociation Reagent	Thermo Fisher Scientific/Gibco	A1110501	100 mL
<b>Disposable material</b>			
24-well Clear Flat Bottom Ultra-Low Attachment Multiple Well Plates	Corning/Costar	3473	
24-well Clear TC-treated Multiple Well Plates	Corning/Costar	3526	
40 µm Cell Strainer	Corning/Falcon	352340	Blue
Bottle Top Vacuum Filter, 0.22 µm pore	Corning	431118	PES membrane, 45 mm diameter neck
Non-Pyrogenic Sterile Centrifuge Tube	any brand		with conical bottom
Non-Pyrogenic sterile tips of 1,000 µl, 200 µl and 10 µl.	any brand		
Sterile cotton gauzes			
Sterile microcentrifuge tubes of 1.5 mL	any brand		
Sterile serological pipettes of 5, 10 and 25 mL	any brand		
Sterile surgical gloves	any brand		
Syringe Filters, 0.22 µm pore	Merk Millipore	SLGPR33RB	Polyethersulfone (PES) membrane, 33 mm diameter
<b>Equipment and surgical instruments</b>			
Biological safety cabinet			
Dissecting Scissors			
Dumont Forceps			
Motorized Pipet Filler/Dispenser			
Micropipettes			
Petri Dishes			
Scalpel Blades			
Stainless-steel Spatula			