

Materials List for:

# Isolation and Culture of Neural Crest Cells from Embryonic Murine Neural Tube

Elise R. Pfaltzgraff<sup>1</sup>, Nathan A. Mundell<sup>1,2</sup>, Patricia A. Labosky<sup>3</sup>

<sup>1</sup>Department of Cell and Developmental Biology, Center for Stem Cell Biology, Vanderbilt University Medical Center

<sup>2</sup>Department of Pharmacology, Center for Stem Cell Biology, Vanderbilt University Medical Center

<sup>3</sup>Vanderbilt University Medical Center

Correspondence to: Patricia A. Labosky at [Trish.Labosky@vanderbilt.edu](mailto:Trish.Labosky@vanderbilt.edu)

URL: <https://www.jove.com/video/4134>

DOI: [doi:10.3791/4134](https://doi.org/10.3791/4134)

## Materials

Name	Company	Catalog Number	Comments
DMEM (low glucose)	GIBCO, by Life Technologies	11885	
Neurobasal Medium	GIBCO, by Life Technologies	21103	
BSA	Sigma-Aldrich	A3912-10G	
dPBS	GIBCO, by Life Technologies	14190-144	
IGF1	BD Biosciences	354037	Store in 50 µg/mL aliquots
bFGF	BD Biosciences	354060	Store in 25 µg/mL aliquots
Fibronectin	GIBCO, by Life Technologies	33016-015	Stored in 1mg/mL aliquots
Retinoic Acid	Sigma-Aldrich	R2625	Put into solution with ethanol, make 35 µg/ml aliquots
2-mercapt-ethanol	Sigma-Aldrich	D-5637	
N2 supplement	GIBCO, by Life Technologies	17502-048	
B27 supplement	GIBCO, by Life Technologies	17504-044	
Steriflip 0.22 µm filters	EMD Millipore	SCGP00525	
Penicillin/streptomycin	Invitrogen	15140122	
0.20 µm filters	Corning	431219	
Syringes (for filtration)	BD Biosciences	301604	
Four well plates	Thermo Fisher Scientific, Inc.	176740	
Collagenase/Dispase	Roche Group	269 638	Activity varies by batch. Stored in 100 mg/mL aliquots.
Insulin needles (29 ½ gage)	BD Biosciences	309306	
Hypoxia Chamber	Billups-Rothenberg, Inc.		
Oxygen Analyzer	Billups-Rothenberg, Inc.		
Forceps #5	Fine Science Tools		For removing uterus and decida.