

Materials List for:

# Isolation of Primary Murine Retinal Ganglion Cells (RGCs) by Flow Cytometry

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## Materials

Name	Company	Catalog Number	Comments
Anti-mouse CD15 PE	BioLegend	125606	Clone MC-480
Anti-mouse CD48 PE-Cy7	BioLegend	103424	Clone HM48-1
Anti-mouse CD57	Sigma Aldrich	C6680-100TST	Clone VC1.1
Anti-mouse CD90.2 AF700	BioLegend	105320	Clone 30-H12
Brilliant Violet 421 Goat Anti-mouse IgG	BioLegend	405317	Clone Poly4053
Purified Anti-mouse CD16/32	BioLegend	101302	FcgRII/III block, Clone 93
Zombie Aqua	BioLegend	423102	Live cell/ Dead cell discrimination
Fetal Bovine Serum	Hyclone	SH30071.03	U.S. origin
AbC Total Antibody Compensation Bead Kit	Thermo Fisher Scientific	A10497	Multi-species Ig
Neurobasal Medium	Thermo Fisher Scientific	21103049	Add serum to media prior to culture.
Phosphate-Buffered Saline (PBS)	Thermo Fisher Scientific	10010049	Saline solution
Dissection Microscope	Olympus	SZ-PT Model	Stereo Microscope
Sorvall Centrifuge	Thermo Scientific	ST 16R	All centrifugation performed at RT
Base Plate – Dissection Pan	Fisher Scientific	SB15233FIM	A wax plate can also be used
Forceps	Aesculap	5002-7	4 ½ inches
Iris Scissors, Straight	Aesculap	1360	5 ½ inches
Falcon 15 mL conical tubes	Fisher Scientific	352097	Polypropylene tubes
Falcon 50 mL conical tubes	Fisher Scientific	352098	Polypropylene tubes
BD FACS Tubes	Fisher Scientific	352003	Polypropylene tubes
40 mm dishes	MidSci	TP93040	Tissue culture treated
70 µm nylon strainer	MidSci	70ICS	sterile
40 µm nylon strainer	MidSci	40ICS	sterile
BD 10 mL syringe	Fisher Scientific	301604	Disposable Syringe without needle
Pestles	MidSci	PEST	sterile
Wheaton Vials	Fisher Scientific	986734	No Liner
BD 30 G needle	Fisher Scientific	305128	1 inch
Hausser Scientific Bright-Line Glass Counting Chamber	Fisher Scientific	0267151B	Hemocytometer
Gibco Trypan blue 0.4% Solution	Fisher Scientific	15250061	Viability Dye
Eppendorf tubes	Fisher Scientific	05-402-25	1.5mL

EVOS Flويد Cell Imaging	Thermo Fisher Scientific	447113	Fluorescence Imaging with a 20X objective
100% Ethanol	Fisher Scientific	04-355-452	Used to make 70% Ethanol
Pipet-Lite LTS Pipette L-1000XLS+	Rainin	17014282	LTS Pipette
Pipet-Lite LTS Pipette L-200XLS+	Rainin	17014391	LTS Pipette
Pipet-Lite LTS Pipette L-20XLS+	Rainin	17014392	LTS Pipette
Rack LTS 1000 mL – GPS-L1000S	Rainin	17005088	Blue Rack Sterile Tips
Rack LTS 250 mL – GPS-L250S	Rainin	17005092	Green Rack Sterile Tips
Rack LTS 20 mL – GPS-L10S	Rainin	17005090	Red Rack Sterile Tips
FACSAria II Cell Sorter	BD Biosciences	N/A	Custom order
LSR II Cytometer	BD Biosciences	N/A	Custom order
<i>Abca8a</i>	Thermo Fisher Scientific	Mm00462440_m1	Müller cells
<i>Aldh1al</i>	Thermo Fisher Scientific	Mm00657317_m1	Müller cells
<i>Aqp4</i>	Thermo Fisher Scientific	Mm00802131_m1	Astrocytes
<i>Calb2</i>	Thermo Fisher Scientific	Mm00801461_m1	Amacrine, Horizontal
<i>Cd68</i>	Thermo Fisher Scientific	Mm03047340_m1	Retinal Pigment Epithelial Cells
<i>Gad2</i>	Thermo Fisher Scientific	Mm00484623_m1	Amacrine
<i>Hprt</i>	Thermo Fisher Scientific	Mm01545399_m1	House keeping gene
<i>Lhx1</i>	Thermo Fisher Scientific	Mm01297482_m1	Horizontal
<i>Lim2</i>	Thermo Fisher Scientific	Mm00624623_m1	Horizontal
<i>Nrl</i>	Thermo Fisher Scientific	Mm00476550_m1	Photoreceptors
<i>Ntrk1</i>	Thermo Fisher Scientific	Mm01219406_m1	Horizontal
<i>Pcp4</i>	Thermo Fisher Scientific	Mm00500973_m1	Bipolar, Amacrine
<i>Pou4f1</i>	Thermo Fisher Scientific	Mm02343791_m1	Retinal Ganglion Cells
<i>Prdx6</i>	Thermo Fisher Scientific	Mm00725435_s1	Astrocytes
<i>Prkca</i>	Thermo Fisher Scientific	Mm00440858_m1	Bipolar
<i>Prox1</i>	Thermo Fisher Scientific	Mm00435969_m1	Horizontal
<i>Pvalb</i>	Thermo Fisher Scientific	Mm00443100_m1	Amacrine
<i>Rbpms</i>	Thermo Fisher Scientific	Mm02343791_m1	Retinal Ganglion Cells
<i>Rom1</i>	Thermo Fisher Scientific	Mm00436364_g1	Photoreceptors
<i>Rpe65</i>	Thermo Fisher Scientific	Mm00504133_m1	Retinal Pigment Epithelial cells
<i>Slc1a3</i>	Thermo Fisher Scientific	Mm00600697_m1	Astrocytes
<i>Slc6a9</i>	Thermo Fisher Scientific	Mm00433662_m1	Amacrine
<i>Sncg</i>	Thermo Fisher Scientific	Mm00488345_m1	Retinal Ganglion Cells
<i>Tubb3</i>	Thermo Fisher Scientific	Mm00727586_s1	Retinal Ganglion Cells
<i>Vim</i>	Thermo Fisher Scientific	Mm01333430_m1	Müller cells
Taqman Universal Master Mix	Thermo Fisher Scientific	4440047	qPCR Reagent
miRNeasy Mini Kit	Qiagen	217004	RNA Isolation
SuperScript VILO cDNA Synthesis Kit	Thermo Fisher Scientific	11754250	cDNA synthesis
Taqman PreAmp Master Mix	Thermo Fisher Scientific	4391128	Pre-Amplification step
BD Cytotfix/ Cytoperm	BD Biosciences	554714	Fixation/ Permeabilization Buffer
BD Perm/ Wash	BD Biosciences	554723	Permeabilization Solution
RBPMS	Santa Cruz Biotechnology	sc-86815	intracellular antibody
SNCG	Gene Tex	GTX110483	intracellular antibody
BRN3A	Santa Cruz Biotechnology	sc-8429	intracellular antibody

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TUJ1	BioLegend	801202	intracellular antibody
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