

Materials List for:

# Where You Cut Matters: A Dissection and Analysis Guide for the Spatial Orientation of the Mouse Retina from Ocular Landmarks

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## Materials

Name	Company	Catalog Number	Comments
0.1 M Phosphate Buffered Saline	Sigma-Aldrich	P5244	
Axioplan2 Epifluorescent Microscope	Zeiss	N/A	
Clear Nailpolish	N/A	N/A	
Corning LSE Low Speed Orbital Shaker	Sigma-Aldrich	CLS6780FP	
Costar TC-Treated 24-well Plates	Sigma-Aldrich	CLS3524	
Dissection Microscope	Olympus	SZ51	
Donkey anti-Goat Alexa 594	Life Technologies	A11058	
Donkey anti-Rabbit Alexa 594	Life Technologies	A21207	
Donkey Normal Serum	Millipore	566460	Use at 5.2% (52 $\mu$ L with 86 $\mu$ L of 20% Triton X-100 and 863 $\mu$ L of 0.1M PBS for 1 mL of blocking solution)
Fisherbrand Superfrost Plus Microscope Slides	Fisher Scientific	12-550-15	
Goat anti-s-opsin	Santa Cruz Biotechnologies	sc-14363	Not commercially available as of 2017
Graefe Curved Forceps	Fine Science Tools	11052-10	
ImageJ or FIJI	National Institute of Health	N/A	Freely available software
Low Temperature Cautery Ophthalmic Fine Tip Caulerizer	Bovie Medical Corporation	AA00	
MATLAB	MathWorks	N/A	At least version 2007b or later
Micro Cover Glasses	VWR International	48393-241	
Micro Slide Trays	VWR International	82020-913	
Moirra Ultra Fine Forceps	Fine Science Tools	11370-40	
Nitrocellulose membrane	Millipore	HAWP04700	
Paraformaldehyde	Electron Microscopy Sciences	15714-S	Use at 4% (25 $\mu$ L and 875 $\mu$ L of 0.1 M PBS for 1 mL of fixative)
PrecisionGlide Needle 20G (0.90 mm x 25 mm)	BD PrecisionGlide	305175	
Pyrex Glass Petri Dish	Sigma-Aldrich	CLS3160152	
R	The R Project for Statistical Computing	N/A	Freely available software; version 3.4.3 or later
Rabbit anti-s-opsin	Millipore	ABN1660	
Retiga R3 Microscope Camera	Qimaging	01-RET-R3-R-CLR-14-C	

RetiStruct	N/A	N/A	Freely available software compatible with Windows 7 or Windows 10
Shandon Aqua-Mount Slide Mounting Media	Fisher Scientific	14-390-5	
Triton X-100	Sigma-Aldrich	T8787	Use 1.7% (86 $\mu$ L of 20% Triton-X with 52 $\mu$ L of Donkey Normal Serum and 863 $\mu$ L of 0.1 M PBS for 1 mL of blocking solution)
Vannas Spring Dissection Scissors	Fine Science Tools	15000-03	
5MP USB Microscope Digital Camera	AmScope	MU500	To be used with the Olympus Dissection Microscope