

Materials List for:

Whole Mount Immunofluorescent Staining of the Neonatal Mouse Retina to Investigate Angiogenesis *In vivo*

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Materials

Name	Company	Catalog Number	Comments
Material			
Plastic pipettes 3 ml	Scientific Laboratory Supplies	PIP4210	Remove tip with scissors to create a wide bore
BD Falcon 24-well plates	Scientific Laboratory Supplies	353226	
Select Petri dishes TV 90 mm	Scientific Laboratory Supplies	SLS2002	
Histobond slides	VWR	631-0624	
Coverslips 22 x 22 mm	VWR	631-1336	
Dumont Tweezers #5	World precision instruments	14095	
Spring scissors 10.5 cm long, with straight 8 mm blades	World precision instruments	501235	Used for enucleation
Vannas scissors 8.5 cm long, with straight 7 mm blades, and 0.025 x 0.015 mm superfine tips	World precision instruments	500086	Used for dissecting retina
Superfine vannas scissors 8 cm long with straight 3 mm blades, and 0.015 x 0.015 mm superfine tips	World precision instruments	501778	Used for dissecting retina
crystal clear [®] tubes 2 ml	Starlab	E1420-2000	
Reagents			
Sodium phosphate dibasic	Sigma	S0876	PBS reagent
Potassium phosphate monobasic	Sigma	P5655	PBS reagent
Sodium chloride	Sigma	S9625	PBS reagent
Paraformaldehyde	Sigma	P6148	Make up in 2x PBS and store at -20 °C
BSA	Sigma	A7638	
Triton X-100	Sigma	T9284	
Donkey serum	Sigma	D9663	
Goat serum	Vector	S-1000	
Prolong Gold anti-fade reagent	Invitrogen	P36930	Mounting reagent
Isolectin GS-IB4-alexa 594	Invitrogen	I21413	Use at 1:200 dilution
Isolectin GS-IB4-alexa 488	Invitrogen	I21411	Use at 1:200 dilution
Primary Antibodies			
Anti-NG2 (rabbit polyclonal)	Millipore	AB5320	Detects pericytes
Anti-GFAP (clone GA5, mouse monoclonal)	Millipore	MAB360	Detects astrocytes

Anti-Desmin (clone Y66, rabbit monoclonal)	Millipore	04-585	Detects pericytes
Anti-Collagen IV (rabbit polyclonal)	Chemicon	AB756P	Detects vascular basement membrane
Anti-alpha smooth muscle actin-Cy3 (clone 1A4, mouse monoclonal)	Sigma	C6198	Detects vascular smooth muscle cells.
Anti-Endoglin (clone MJ7/18, rat monoclonal)	BD Pharmingen	550546	Detects endothelial cells
Anti-CD31 (clone MEC13.3, rat monoclonal)	BD Pharmingen	553370	Detects endothelial cells
Anti-VE-Cadherin (clone 11D4.1, rat monoclonal)	BD Pharmingen	550548	Detects endothelial cell junctions
Anti-Alk1 (goat polyclonal)	R&D Systems	AF770	Detects endothelial cells
Secondary Antibodies			
Goat anti-rabbit-Alexa594	Invitrogen	A11012	All secondary antibodies are aliquoted immediately on arrival and stored at -20 °C.
Goat anti-rat-Alexa488	Invitrogen	A11006	All secondary antibodies are aliquoted immediately on arrival and stored at -20 °C.
Goat anti-rat-Alexa594	Invitrogen	A11007	All secondary antibodies are aliquoted immediately on arrival and stored at -20 °C.
Goat anti-mouse-Alexa488	Invitrogen	A11029	All secondary antibodies are aliquoted immediately on arrival and stored at -20 °C.
Donkey anti-goat-Alexa594	Invitrogen	A11058	All secondary antibodies are aliquoted immediately on arrival and stored at -20 °C.
Microscopes			
Dissection microscope	Zeiss	Stemi SV6	
Camera	Zeiss	Axiocam HRc	Camera for dissection microscope
Epifluorescent Microscope	Zeiss	Axiomager with Apotome	
Camera	Zeiss	Axiocam HRm	Camera for Axioimager
Confocal Microscope	Nikon	A1R	