

Materials List for:

High-Resolution Confocal Imaging of the Blood-Brain Barrier: Imaging, 3D Reconstruction, and Quantification of Transcytosis

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Materials

Name	Company	Catalog Number	Comments
Rat monoclonal antibody clone ER-MP12 against CD31/PECAM	Novus Biologicals	MCA2388	Labels Brain Endothelial Cells Use at dilution 1:100 detect with donkey polyclonal anti-rat IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
Rat monoclonal antibody against Podocalyxin	R&D Systems	MAB1556	Labels Lumen of capillaries Use at dilution 1:100 detect with donkey polyclonal anti-rat IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
Rabbit polyclonal antibody against CollagenIV	Biotrend	BT21-5014-70	Labels Basement membrane of capillaries Use at dilution 1:100 detect with donkey polyclonal anti-rabbit IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
Goat polyclonal antibody against CD13	R&D Systems	AF2335	Labels pericytes Use at dilution 1:100 detect with donkey polyclonal anti-goat IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
Mouse monoclonal antibody clone G-A-5 against GFAP coupled to Cy3	Abcam	ab49874	Labels Astrocytes Use at dilution 1:100
Rabbit polyclonal antibody against Iba-1	Wako	019-19741	Labels Microglia Use at dilution 1:100 detect with donkey polyclonal anti-rat IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
Rat monoclonal antibody ABL93 against LAMP2	Fitzgerald	10R-CD107BBMSP	Labels Lysosomes Use at dilution 1:100 detect with donkey polyclonal anti-rat IgG (H+L) coupled with suitable AlexaFluor dye, used at dilution 1:400
donkey polyclonal antibody against mouse IgG (H+L) AlexaFluor594	LifeTechnologies	A21203	Use at dilution 1:400
donkey polyclonal antibody against mouse IgG (H+L) AlexaFluor488	LifeTechnologies	A21202	Use at dilution 1:400
goat polyclonal antibody against mouse IgG (H+L) AlexaFluor555	LifeTechnologies	A21422	Use at dilution 1:400

Filter paper	Sigma-Aldrich	WHA10334347	Whatman prepleated qualitative filter paper Grade 0858 1/2, grained
Cyanoacrylate glue	Roth Carl	258.1	Roti Coll 1
Fluorescent Mounting medium	Dako	S3023	Dako fluorescent mounting medium
Adult mice	The Jackson Laboratory	000664	C57BL/6J male or female mice between 9 and 19 months of age
Vibratome	Leica Biosystems	14047235612	Leica VT100S vibrating blade microtome
Laser Scanning Confocal microscope	Leica Microsystems	NA	Leica TCS SP8 X with HyD detectors and White light laser
Image processing software	Leica Microsystems	NA	Leica Application Suite AF version 3.1.0 build 8587
Image analysis software	Bitplane scientific software	NA	Imaris version 7.6.5 build 31770 for x64
Fluorescence SpectraViewer	ThermoFisher Scientific	NA	https://www.thermofisher.com/ch/en/home/life-science/cell-analysis/labeling-chemistry/fluorescence-spectraviewer.html