

Materials List for:

Three-dimensional Rendering and Analysis of Immunolabeled, Clarified Human Placental Villous Vascular Networks

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URL: <https://www.jove.com/video/57099>

DOI: [doi:10.3791/57099](https://doi.org/10.3791/57099)

Materials

Name	Company	Catalog Number	Comments
10% Formaldehyde solution (w/v) in aqueous phosphate buffer	Macron Fine Chemicals	H-121-08	General fixation agent, ready to use formula, use caution as vapors are toxic
Scalpel blades	ThermoFisher Scientific	08-916-5B No. 11	
Scalpel	ThermoFisher Scientific	08-913-5	
Fine forceps	Electron Microscopy Services	78354-119	
Micro Tube (1.7 mL)	PGC Scientifics	505-201	
Phosphate buffered saline	Sigma	D8537	PBS
Pipette	VWR	52947-948	disposable, 3ml transfer pipette
Triton X-100	Boehriner Mannheim	789 704	Dilute to 0.1% from stock
Goat Serum	Gibco	16210-064	Dilute to 2% in PBS solution
Mouse monoclonal anti-ck7 Keratin 7 Ab-2 (Clone OV-TL 12/30)	ThermoFisher Scientific	MS-1352-RQ	
Rabbit Anti-CD31 antibody	Abcam	ab28364	
green emitting (520 nm) fluorochrome	Invitrogen	A11017	Alexa-Fluor 488
infrared emitting (652 nm) fluorochrome	Invitrogen	A21072	Alexa Fluor 633
Ethanol alcohol 200 proof	Pharmco-Aaper	111000200	Dilute down to lower concentrations using PBS as needed
Solution-1	Visikol Inc.		Visikol Histo-1
Solution-2	Visikol Inc.		Visikol Histo-2
Skyes-Moore chambers	BellCo Glass Inc.	P/N 1943-11111	
25 gauge needle	ThermoFisher Scientific	14-826AA	BD Precision Glide Needles
3 mL syringe	ThermoFisher Scientific	14-823-40	BD disposable syringe
PDMS silicon sheets	McMaster-Carr	P/N 578T31	
confocal microscope	Nikon Inc.		Nikon C1 Confocal Microscope
Deconvolution software	Media Cybernetics		AutoQuant X22
Fiji image processing software			free, Open source software available at https://fiji.sc
Hematoxylin	Leica Biosystems	3801570	Component 1 of SelecTech H&E staining system
Alcoholic Eosin	Leica Biosystems	3801615	Component 2 of SelecTech H&E staining system

Blue Buffer	Leica Biosystems	3802918	Component 3 of SelecTech H&E staining system
Aqua Define MCX	Leica Biosystems	3803598	Component 4 of SelecTech H&E staining system
Immunohistochemistry detection system	ThermoFisher Scientific	TL-125-QHD	UltraVision Quanto Detection System HRP DAB