

Materials List for:

In Vivo Photolabeling of Cells in the Colon to Assess Migratory Potential of Hematopoietic Cells in Neonatal Mice

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URL: <https://www.jove.com/video/57929>

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Materials

Name	Company	Catalog Number	Comments
Laser			
Light Emitting Diode (LED)	THORLABS	M405FP1	CAUTION: this is a Class 3b laser. Safety goggles must be worn when using the laser. It emits a 405 nm wavelength with a current of 1400 mA. It is fiber-coupled. It accepts SMA connector. https://www.thorlabs.com/thorproduct.cfm?partnumber=M405FP1
LED driver	THORLABS	LEDD1B	Drives a constant current of 1200 mA through the laser. https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=2616
Optogenetics patch cable	THORLABS	M87L01	1 m long cable with an SMA connector. https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=11405&pn=M87L01#11454
Fiber optic cannula	Doric lenses	MFC_480/500-0.5_5mm_ZF1.25_C45	45 mm long cannula with an outer diameter of 500 µm and an inner diameter of 480 µm. The NA value is 0.5. The ferrule is zirconia, 1.25 mm OD. https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=6036
Power supply	THORLABS	KPS101	Supplies 15 V with a current of 2.4 A https://www.thorlabs.com/search/thorsearch.cfm?search=KPS101
LG3 laser safety goggles	THORLABS	LG3	Orange lenses with 47% visible light transmission https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=762&pn=LG3#2523
Red light	Electron Microscopy Sciences	74327-10	15 W lamp https://us.vwr.com/store/product/12360027/paterson-safelight-electron-microscopy-sciences
Intestinal cell isolation			
Isoflurane	Patterson Veterinary	07-893-1389	CAUTION: inhalation of this anesthetic may cause dizziness, drowsiness, or even unconsciousness. This anesthetic should be used in a Class II hood. https://www.pattersonvet.com/

			Supplies/ProductFamilyDetails/ PIF_762328? carouselPageNumber=3
1X HBSS	Gibco	14025076	Ca/Mg free https://www.fishersci.com/shop/products/gibco-hbss-calcium-magnesium-no-phenol-red-4/14025076?searchHijack=true&searchTerm=14025076&se
Calf Serum	Hyclone AZM	197696	
EDTA	Invitrogen	15575020	0.5 M concentration https://www.thermofisher.com/order/catalog/product/15575020?SID=srch-srp-15575020
DTT	Sigma	10197777001	CAUTION: harmful if swallowed and causes skin irritation. 1 M concentration https://www.sigmaaldrich.com/catalog/product/roche/dttro?lang=en&region=US
HEPES	Gibco	15630080	1 M concentration https://www.thermofisher.com/order/catalog/product/15630080?SID=srch-hj-15630080
Petri dish	Corning	353004	https://www.fishersci.com/shop/products/falcon-easy-grip-tissue-culture-dishes-2/08772f?searchHijack=true&searchTerm=08772F&se
70 micron cell strainer	Falcon	352350	https://www.fishersci.com/shop/products/falcon-cell-strainers-4/087712
Micro magnetic stir bar	Fisherbrand	1451364	Rinse in 70% ethanol after each use. Rinse several times in distilled water prior to each use. The bar is 8 mm long with an octagonal shape. https://www.fishersci.com/shop/products/fisherbrand-octagonal-magnetic-stir-bars-12/1451364#?keyword=1451364
Magnetic stir plate	Corning Laboratory Stirrers	440826	https://www.coleparmer.com/i/corning-440826-nine-position-stirrer-120-vac-60-hz/8430420?PubID=UX&persist=true&ip=no&gclid=CjwKCA
Collagenase	Roche	5401020001	https://www.sigmaaldrich.com/catalog/product/roche/05401020001?lang=en&region=US&gclid=CjwKCA
DNase I	Sigma	10104159001	https://www.sigmaaldrich.com/catalog/product/roche/10104159001?lang=en&region=US
1X PBS	Gibco	20012-027	https://www.thermofisher.com/order/catalog/product/20012027?SID=srch-hj-20012-027
Pipet aid	Thermo Scientific	14387165	https://www.fishersci.com/shop/products/s1-pipette-fillers/14387165#?keyword=14387165

10 mL serological pipet	Falcon	357530	https://www.fishersci.com/shop/products/falcon-serological-pipets-bulk-pack-5/p-163659
25 mL serological pipet	Falcon	357515	https://www.fishersci.com/shop/products/falcon-serological-pipets-bulk-pack-5/p-163659
15 mL conical centrifuge tube	Thermo Scientific	339651	https://www.thermofisher.com/order/catalog/product/339650
50 mL conical centrifuge tube	Thermo Scientific	339653	https://www.thermofisher.com/order/catalog/product/339650
Single cell suspension			
Eppendorf tubes	Seal-Rite	1615-5500	Holds 1.5 mL. https://www.usascientific.com/Seal-Rite-1.5-ml-tube.aspx
Tissue homogenizer	Kimble	K7495400000	Requires 2 AA batteries. https://www.fishersci.com/shop/products/kontes-pellet-pestle-cordless-motor-cordless-motor/k7495400000
Homogenizer tips	Kimble	7495210590	Plastic, 0.5 mL tips https://www.fishersci.com/shop/products/kimble-chase-kontes-pellet-pestle-14/k7495210590#?keyword=7495210590
ACK lysing buffer	Gibco	A10492-01	https://www.thermofisher.com/order/catalog/product/A1049201?SID=srch-hj-A10492-01
40 micron cell strainer	Falcon	08-771-1	https://www.fishersci.com/shop/products/falcon-cell-strainers-4/087711
Antibodies			
BV786 anti-mouse CD45	BD	564225	Clone 3O-F11 https://www.bdbiosciences.com/us/reagents/research/antibodies-buffers/immunology-reagents/anti-mouse-antibodies/cell-surface-antigens/bv786-rat-anti-mouse-cd45-30-f11/p/564225
Live/Dead	Invitrogen	L34962	https://www.thermofisher.com/order/catalog/product/L34962
Other			
Razor blades	VWR	55411-050	Use for decapitation. https://us.vwr.com/store/product/4548306/vwr-razor-blades