

Materials List for:

***In vivo* Clonal Tracking of Hematopoietic Stem and Progenitor Cells Marked by Five Fluorescent Proteins using Confocal and Multiphoton Microscopy**

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URL: <https://www.jove.com/video/51669>

DOI: [doi:10.3791/51669](https://doi.org/10.3791/51669)

Materials

Name	Company	Catalog Number	Comments
Production of Viruses			
LeGO-Cer2	Addgene	27338	Expression of Cerulean
LeGO-G2	Addgene	25917	Expression of eGFP
LeGO-V2	Addgene	27340	Expression of Venus
LeGO-T2	Addgene	27342	Expression of tdTomato
LeGO-C2	Addgene	27339	Expression of mCherry
Calcium Phosphate Transfection Kit	Sigma	CAPHOS-1KT	
Tissue culture dish	BD Falcon	353003	
IMDM	Gibco, Life Technology	12440-053	
Fetal Bovine Serum Heat Inactivated	Sigma	F4135-500ML	
Pen Strep Glutamine	Gibco, Life Technology	10378-016	
Centrifuge Tubes	Beckman Coulter	326823	
SW28 Ultracentrifuge	Beckman Coulter	L60	
Millex Syringe Driven Filter Unite (0.22 µm)	Millipore	SLGS033SS	
Mouse Cell Collection, Purification, Transduction, and Transplantation			
ACK lysing buffer	Quality Biologicals Inc.	118-156-101	
Lineage Cell Depletion Kit (mouse)	Miltenyi Biotec Inc. USA	130-090-858	
LS columns + tubes	Miltenyi Biotec Inc. USA	130-041-306	
Pre-Separation Filters (30 µm)	Miltenyi Biotec Inc. USA	130-041-407	
StemSpan SFEM serum-free medium for culture and expansion of hematopoietic cells (500 ml)	StemCell Technologies Inc	9650	
Murine IL-11 CF	R & D Systems Inc	418-ML-025/CF	100 µg/ml is 1,000x
Recombinant murine SCF	RDI Division of Fitzgerald Industries Intl	RDI-2503	100 µg/ml is 2,000x
Recombinant murine IL-3	R & D Systems Inc	403-ML-050	20 µg/ml is 2,000x
FLT-3 Ligand	Miltenyi Biotec Inc. USA	130-096-480	100 µg/ml is 1,000x
12-well plates, Costar	Corning Inc.	3527	
Retronectin	Takara Bio Inc	T100A/B	Resuspend at 50 µg/ml
Protamine Sulfate	Sigma	P-4020	4 µg/ml is 1,000x
Confocal and Two-photon Microscopy			
DMEM	Lonza	12-614F	

1 M Hepes	Cellgro, Mediatech Inc.	25-060-CI	
Glass bottom culture dish P35G-0-20-C	MatTek Corporation	P35G-0-20-C	
Glass bottom culture dish P35G-0-14-C	MatTek Corporation	P35G-0-14-C	
Nunc Lab-Tek Chambered Coverglass #1 Borosilicate coverglass; 4-well	Thermo Scientific	155383	
Coverslips 22 mm No 2	Thomas Scientific	6662-Q55	
Leica TCS SP5 AOBS five channels confocal and multi- photon microscope	Leica Microsystems		
Chameleon Vision II -Ti:Saph laser range 680-1,080 nm	Coherent		
Chameleon Compact OPO laser range 1,030-1,350 nm	Coherent		
HCX-IRAPO-L 25X/0.95 NA water dipping objective (WD=2.5 mm)	Leica Microsystems		
HC-PLAPO-CS 20X/0.70 NA dry objective (WD=0.6 mm)	Leica Microsystems		
HC-PL-IRAPO 40X/1.1 NA water immersion objective (WD=0.6 mm)	Leica Microsystems		
Imaris software version 7.6	Bitplane		