

Materials List for:

Chronic, Acute, and Reactivated HIV Infection in Humanized Immunodeficient Mouse Models

Federico Perdomo-Celis^{1,2}, Sandra Medina-Moreno¹, Alonso Heredia¹, Harry Davis¹, Joseph Bryant¹, Juan Carlos Zapata¹

¹Institute of Human Virology, School of Medicine, University of Maryland

²Grupo Inmunovirología, Facultad de Medicina, Universidad de Antioquia

Correspondence to: Juan Carlos Zapata at jczapata@ihv.umaryland.edu

URL: <https://www.jove.com/video/60315>

DOI: [doi:10.3791/60315](https://doi.org/10.3791/60315)

Materials

Name	Company	Catalog Number	Comments
0.5 ml Microcentrifuge tubes	Neptune	3735.S.X	
1.5 ml Microcentrifuge tubes	Neptune	3745.S.X	
10 ml Serological pipettes	stellar scientific	VL-4090-0010	
15 ml conical tubes	Stellar scientific	T15-600	
25 ml Serological pipettes	stellar scientific	VL-4090-0025	
5 ml Serological pipettes	stellar scientific	VL-4090-0005	
50 ml conical tubes	Stellar scientific	T50-600	
ACK lysis buffer	Quality biological	118-156-101	
Alcohol prep pads	Fisher scientific	06-669-62	Sterile
Anti-Human CD3 clone UCHT1	Biolegend	300439	APC conjugated
Anti-Human CD4 clone OKT4	Biolegend	317420	AF488 conjugated
Anti-Human CD45 clone 2D1	Biolegend	368522	BV421 conjugated
Anti-Human CD8 clone SK1	Biolegend	344710	PerCP-Cy5.5 conjugated
Biosafety cabinet level 2			If possible connected to an exhaust chimney when handling Isoflurane
Bonnet	Fisher scientific	17-100-900	Single use cap for basic protection
Cavicide	Metrex	13-1000	Surface disinfectant
CD34+ cells	Lonza	2C-101	As many vials available from a single donor
Centrifuge	Beckman	65-6KR	
Clear jar	Amazon	77977	
Cotton gauze pad	Fisher scientific	22-415-468	Sterile
Disposable lab coats	Fisher scientific	19-472-422	
EDTA micro tubes	Greiner bio-one	450480	
Face Mask	Fisher scientific	17-100-897	
FACS lysing solution	BD	340202	
FBS premium HI	Atlanta biologicals	S1115OH	
Ficoll	GE health one	17-1440-02	
Flow cytometer			We used FACS Aria II
Flow cytometry tubes	Falcon	352054	5 ml polystyrene and round bottom
HIV BaL			Prepared in our uQUANT core facility
Human PBMCs			HIV positive and negative volunteers

Infrared warming pad	Venet scientific	DCT-25	Temporary therapeutic warming pad for small animals
Isentress (Raltegravir)	Merck	NSC 0006-0227061	Antiretroviral medication to treat human immunodeficiency virus (HIV)-Integrase inhibitor
Isoflurane	Henry Schein	NDC 11695-6776-2	
Mark I irradiator			Equipment belonging to university of Maryland
Micro pipettes			
Microcentrifuge	Eppendorf		
Mouse ear tags	National Band & Tag company	1005-1L1	
Natelson blood collection tubes	Fisher scientific	02-668-10	
NOG-EXL	Taconic	HSCFTL-13395-F	
NSG mice	Jackson	5557	Time pregnant females for CD34 engraftment and Juveniles for PBMCs engraftment
NSG-SGM3	Jackson	13062	
Paraformaldehyde 16%	Electron microscopy sciences	15710	
PBS 1X pH 7.4	Gibco	100-10-023	
Petri dishes	Fisher scientific	08-757-28	
Quantistudio qPCR machine	Thermo	QS3	
Reagent reservoirs	Costar	4870	
RPMI media 1640 1X	Gibco	11875-093	
Shoe covers	Fisher scientific	17-100-911	
Sterile disposable Gloves	Microflex	SUF-524	
SuperScript II First-Strand Synthesis SuperMix	Invitrogen	10080-400	cDNA synthesis
Syringes 28-G x 1/2	BD	329-461	
Syringes 29-G x 1/2	BD	324-702	
Truvada (Emtricitabine and Tenofovir	Gilead	NDC 61958-0701-1	Antiretroviral medication to treat human immunodeficiency virus (HIV)-Nucleoside analog-transcriptase inhibitor
Trypan blue	Sigma	T8154	Cell count and viability
Vick Vaporub	School health	43214	Ointment based on menthol and eucalyptus
Water molecular biology grade	Quality biological	351-029-131	