

Materials List for:

Whole-animal Imaging and Flow Cytometric Techniques for Analysis of Antigen-specific CD8+ T Cell Responses after Nanoparticle Vaccination

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Materials

Name	Company	Catalog Number	Comments
1. Synthesis and characterization of ICMVs co-loaded with protein antigen and adjuvant molecules			
1,2-dioleoyl- <i>sn</i> -glycero-3-phosphoethanolamine- <i>N</i> -[4-(<i>p</i> -maleimidophenyl)butyramide] (sodium salt) (MPB)	Avanti Polar Lipids, INC.	870012	
1,2-dioleoyl- <i>sn</i> -glycero-3-phosphocholine (DOPC)	Avanti Polar Lipids, INC.	850375	
Monophosphoryl Lipid A (Synthetic) (PHAD™) (MPLA)	Avanti Polar Lipids, INC.	699800	
20 ml glass vials	Wheaton	0334125D	
Symphny Vacuum Oven	VWR	414004-580	
Ovalbumin (OVA)	Worthington	3054	
Bis-Tris Propane (BTP)	Fisher	BP2943	
Q125 Sonicator (125 W/20 kHz)	Qsonica	Q125-110	
Dithiothreitol (DTT)	Fisher	BP172	
2 kDa Thiolated Polyethylene Glycol (PEG-SH)	Laysan Bio	MPEG-SH-2000-1g	
Malvern ZetaSizer Nano ZSP	Malvern		
ZetaSizer Cuvettes	Malvern	DTS1070	
2. Examination of lymph node draining of fluorescence-tagged ICMVs with confocal microscopy			
1,1'-Dioctadecyl-3,3,3',3'-Tetramethylindodicarbocyanine, 4-Chlorobenzenesulfonate Salt (DID)	Life Technologies	D-7757	
Alexa Fluor 555-succinimidyl ester (AF555-NHS)	Life Technologies	A37571	
Tissue-Tek OCT freezing medium	VWR	25608-930	
Tissue Cryomolds	VWR	25608-922	
3. Monitoring expansion of antigen-specific, luciferase-expressing CD8+ T cells after nanoparticle vaccination with whole animal imaging			
C57BL/6 mice	Jackson	000664	
Albino C57BL/6 mice	Jackson	000058	
OT-1 C57BL/6 mice	Jackson	003831	
70 µm nylon strainer	BD	352350	
EasySep™ Mouse CD8+ T Cell Isolation Kit	StemCell	19853	

IVIS® whole animal imaging system	Perkin Elmer		
4. Peptide-MHC tetramer staining of peripheral blood mononuclear cells (PBMCs) for flow cytometric analysis of antigen-specific CD8+ T cells			
K ₂ EDTA tubes	BD	365974	
ACK lysis buffer	Life Technologies	A10492-01	
Anti-CD16/32 Fc Block	Ebioscience	14-0161-86	
H-2K ^b OVA Tetramer	MBL	TS-5001-1C	
Anti-CD8-APC	BD	553031	
Anti-CD44-FITC	BD	553133	
Anti-CD62L-PECy7	Ebioscience	25-0621-82	
4',6-Diamidino-2-phenylindole dihydrochloride (DAPI)	SIGMA	D8417-10MG	
CyAn Flow Cytometer	Beckman Coulter		
FlowJo Software	FlowJo		