

Materials List for:

Detecting Migration and Infiltration of Neutrophils in Mice

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Materials

Name	Company	Catalog Number	Comments
0.1% Fast Green Solution	Solarbio	8348b	Transfer 20 mg of fast grene FCF in one vial into another 100 mL beaker. Add 20 mL of H ₂ O into the beaker and dissolve the stain by stirring to make 0.1% fast green solution, and filter it using a Nalgene PES 75mm filter
0.1% Safranin O Staining Solution	Solarbio	8348a	Transfer 20 mg of safranin O stain in one vial into a 100 ml beaker. Add 20 mL of H ₂ O into the beaker and dissolve the stain by stirring to make 0.1% safranin O staining solution, and filter it using a Nalgene PES 75mm filter
0.5 M Ethylenediaminetetraacetic acid solution (EDTA), pH 8.0	Sigma	324506	Sterile
100% Ethanol	Beijing Chemical Works		
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15 mL Conical Polypropylene Centrifuge Tube	Falcon	14-959-53A	
23 G x 1 1/4" Needle	BD	305120	
26 G x 3/8" Needle	BD	305110	
3% bovine serum albumin (BSA)			Dissolve 0.3 g BSA in 10 mL PBS
3% H ₂ O ₂			Mix 1 mL 30% H ₂ O ₂ with methanol with 9 mL methanol
3,3'-diaminobenzidine (DAB) kit	ZSGB-BIO	ZLI-9018	
30 G x 1/2" Needle	BD	305106	
30% H ₂ O ₂	Beijing Chemical Works		
5 mL Syringe	BD	Z683574	
50 mL Conical Polypropylene Centrifuge Tube	Falcon	14-432-22	
50% Ethanol			Mix 500 mL 100% ethanol with 500 mL dH ₂ O
54.8% Percoll			Mix 2.74 mL SIP with 2.26 mL 1×PBS, stand still
70% Ethanol			Mix 700 mL 100% ethanol with 300 mL dH ₂ O
70.2% Percoll			Mix 3.51 mL SIP with 1.49 mL 1×PBS, stand still

80% Ethanol			Mix 800 mL 100% ethanol with 200 mL dH ₂ O
95% Ethanol			Mix 950 mL 100% ethanol with 50 mL dH ₂ O
Acid Alcohol Superfast Differentiation Solution	Beyotime	C0165S	
ANTIBODIES			
Anti-Myeloperoxidase Antibody	Abcam	ab208670	
Anti-Neutrophil Elastase Antibody	Abcam	ab21595	
Automatic Hematology Analyzer	Sysmex	XS-800i	
Bovine Serum Albumin (BSA)	VWR	0332-100G	
Complete Freund's Adjuvant, 10 mg/ml	sigma	1002036152	
Cover Slip	CITGLAS	10212432C	
Dial Thickness Gauge	Mitutoyo	7301	
Eppendorf Microtubes, 1.5 mL	Sigma	Z606340	
Foetal Bovine Serum (FBS) Premium	PAN	P30-1302	
Gas Anesthesia System	ZS Dichuang	ZS-MV-IV	
Goat Anti-Rabbit IgG H&L (HRP)	PPLYGEN	C1309	This is the secondary antibody used in the immunohistochemical staining.
Hank's Balanced Salt Solution (HBSS)	Biological Industries, Beth HaEmek, Israel	02-016-1A	Sterile
Hematoxylin Staining Solution	ZSGB-BIO	ZLI-9609	
Lipopolysaccharide (LPS)	Sigma	L3012	
MEDIA AND SUPPLEMENTS			
Modified Safranin O-fast Green FCF Cartilage Stain Kit	Solarbio	G1371	
N-formyl-Met-Leu-Phe (fMLP)	Sigma	47729	
Penicillin Streptomycin Solution, 100×	Invitrogen	1514022	
Percoll	GE Healthcare	10245207	Density gradient medium
Permeabilization Buffer			Mix 100 μL Triton X-100 with 1 L dH ₂ O to get 0.01% Triton X-100
Phosphate Buffer Saline (PBS), 1×			Mix 90% ddH ₂ O with 10% (v/v) 10×PBS, autoclaved
Phosphate Buffer Saline (PBS), 10×			Dissolve 16 g NaCl, 0.4 g KCl, 2.88 g Na ₂ HPO ₄ ·2H ₂ O, 0.48 g KH ₂ PO ₄ (anhydrous) in 200 mL ddH ₂ O, adjust pH 7.4, autoclaved
PLASTIC WARES AND EQUIPMENTS			
POWDER			
Proteose Peptone	Oxoid	1865317	
Retrieval Buffer			Mix 18 mL retrieval buffer A with 82 mL retrieval buffer B, add dH ₂ O to 1000 mL, adjust pH to 6.0
Retrieval Buffer A Stock for IHC			Dissolve 4.2 g citric acid (C ₆ H ₅ O ₇ ·H ₂ O) in 200 mL dH ₂ O

Retrieval Buffer B Stock for IHC			Dissolve 5.88 g trisodium citrate dihydrate ($C_6H_5Na_3O_7 \cdot 2H_2O$) in 200 mL dH_2O
Roswell Park Memorial Institute (RPMI)-1640 medium	Sigma	R8758	
RPMI-1640 Complete Medium			RPMI-1640 medium is supplemented with 10% FBS and 1% penicillin/streptomycin.
Shu Rui U40 Disposable Sterile Insulin Injection Needle 1 mL	BD	328421	
Slide	CITOGLAS	10127105P-G	
SOLUTION			
Stock Isotonic Percoll (SIP)			Mix 90% (v/v) of percoll with 10% (v/v) 10×PBS, stand still for 20 min
Wash Buffer in Air Pouch Assay			Dilute 0.5M EDTA to 10mM with HBSS
Xylene	Beijing Chemical Works		