

Materials List for

# Digestion of Whole Mouse Eyes for Multi-Parameter Flow Cytometric Analysis of Mononuclear Phagocytes

Steven Droho<sup>1</sup>, Carla M. Cuda<sup>\*2</sup>, Jeremy A. Lavine<sup>\*1</sup>

<sup>1</sup>Department of Ophthalmology, Feinberg School of Medicine, Northwestern University <sup>2</sup>Department of Medicine, Division of Rheumatology, Feinberg School of Medicine, Northwestern University

\* These authors contributed equally

## Corresponding Author

Jeremy A. Lavine

jeremy.lavine@northwestern.edu

## Citation

Droho, S., Cuda, C.M., Lavine, J.A. Digestion of Whole Mouse Eyes for Multi-Parameter Flow Cytometric Analysis of Mononuclear Phagocytes. *J. Vis. Exp.* (), e61348, doi:10.3791/61348 (2020).

## Date Published

June 17, 2020

## DOI

10.3791/61348

## URL

jove.com/video/61348

## Materials

Name	Company	Catalog Number	Comments
0.6 ml microcentrifuge tubes	Fisher Scientific	05-408-120	
1.7 ml microcentrifuge tubes	Costar	3620	
10 ml pipettes	Fisher Scientific	431031	
15 ml conicals	ThermoFisher	339650	
1x HBSS, 500 ml	Gibco	14025-092	
2.5 ml syringe	Henke Sass Wolf	7886-1	
20% paraformaldehyde solution	Electron Microscopy Sciences	15713-S	
25 ml pipettes	Fisher Scientific	431032	
30 G needle	Exel	26437	
3ml luer lock syringe	Fisher Scientific	14955457	
41 x 41 x 8 mm polystyrene weigh dish	Fisher Scientific	08-732-112	
50 ml conicals	Falcon	352070	
96-well, U-bottom assay plate without lid	Falcon	353910	
Amine reactive beads	ThermoFisher	A10628	
Analysis software	FlowJo	v 10	
Anti-rat and anti-hamster Ig kappa bead set	BD Biosciences	552845	
C57BL/6J mice	Jackson Laboratory	664	
Cell counter	Invitrogen	AMQAX1000	
Cell counter slides	Invitrogen	C10283	
Compensation beads	ThermoFisher	01-1111-42	
Count beads	ThermoFisher	01-1234-42	
Curved forceps	Fisher Scientific	16-100-123	
Digestion enzyme	Sigma Aldrich	5401020001	

Dissecting microscope	National Optical and Scientific Instruments, Inc.	DC3-420T	
Dissociation tubes	Miltenyi Biotec	130-096-334	
DNase	Roche	10104159001	
Electronic dissociator	Miltenyi Biotec	130-095-937	
FACS Diva software	BD Biosciences		
Fc block, rat anti-mouse CD16/CD32	BD Biosciences	553142	
Fine forceps	Integra Miltex	17035X	
Flow buffer	Miltenyi Biotec	130-091-221	
Flow cytometer	BD Biosciences		
Flow tubes	Falcon	352008	
Hamster anti-mouse CD11c BV421	BD Biosciences	562782	
Ice bucket	Fisher Scientific	07-210-123	
Live/Dead dye	ThermoFisher	65-0866-14	
Lysing solution, 10x solution	BD Biosciences	555899	
Micro titer tube and rack	Fisher Scientific	02-681-380	
Mouse anti-mouse CD64 PE	BioLegend	139304	
Mouse anti-mouse NK1.1 PECF594	BD Biosciences	562864	
P1000 pipet tips	Denville Scientific	P2404	
P1000 pipettor	Gilson	FA10006M	
P2 pipet tips	eppendorf	22491806	
P2 pipettor	Gilson	FA10001M	
P20 pipettor	Gilson	FA10003M	
P200 pipet tips	Denville Scientific	P2401	
P200 pipettor	Gilson	FA10005M	
Pipet man	Fisher Scientific	FB14955202	
Rat anti-mouse B220 PECF594	BD Biosciences	562313	
Rat anti-mouse CD11b APC-Cy7	BD Biosciences	557657	
Rat anti-mouse CD19 AlexaFluor 700	BD Biosciences	557958	
Rat anti-mouse CD19 PE	BD Biosciences	553786	
Rat anti-mouse CD4 PECF594	BD Biosciences	562314	
Rat anti-mouse CD45 FITC	ThermoFisher	11-0451-82	
Rat anti-mouse CD45 PE-Cy7	BD Biosciences	552848	
Rat anti-mouse CD8 PECF594	BD Biosciences	562315	
Rat anti-mouse Ly6C	BD Biosciences	561085	
Rat anti-mouse Ly6G PECF594	BD Biosciences	562700	
Rat anti-mouse MHC II AlexaFluor 700	BioLegend	107622	
Rat anti-mouse Siglec F PECF594	BD Biosciences	562757	
Rat anti-mouse Tim4 AlexaFluor647	BD Biosciences	564178	
Shaking incubator	Labnet	311DS	
Spring scissors	Fine Science Tools	15024-10	
Sterile cell strainer, 40 mm nylon mesh	Fisher Scientific	22363547	
Sterile water, 500 ml	Gibco	A12873-01	
Swinging bucket centrifuge	eppendorf	5910 R	
Trypan blue, 0.4% solution	Gibco	15250061	