

Materials List for:

Time-lapse 3D Imaging of Phagocytosis by Mouse Macrophages

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Materials

Name	Company	Catalog Number	Comments
24 G plastic catheter	B Braun Mesungen AG, Germany	4254503-01	Used for peritoneal lavage
Hank's buffered salt solution without Ca ²⁺ and Mg ²⁺	Thermo Fisher Scientific	14170120	Used for peritoneal lavage
14 mL polypropylene round bottom tubes	BD Falcon	352059	Used to collect peritoneal cells
RPML 1640 medium containing 20 mM Hepes	Sigma-Aldrich	R7388	Basis medium for assays
Heat-inactivated fetal bovine serum	Thermo Fisher Scientific	10082139	Used as supplement for RPML 1640 media
100x penicillin/streptomycin	Thermo Fisher Scientific	15140122	Used as supplement for RPML 1640 media
Fibronectin-coated μ -Slide I chambers	Ibidi, Martinsried, Germany	80102	Channel slides used for assays
μ -Slide (anodized aluminum) rack	Ibidi, Martinsried, Germany	80003	Autoclavable stackable rack for channel slides
RPML 1640 medium containing bicarbonate	Sigma-Aldrich	R8758	Medium for overnight culture
N-(2-mercaptopropionyl)glycine	Sigma-Aldrich	M6635	Scavenger of reactive oxygen species
Alexa Fluor 488-conjugated rat (IgG2a) monoclonal (clone BM8) anti-mouse F4/80 antibody	Thermo Fisher Scientific	MF48020	Mouse macrophage marker and plasma membrane label
CellMask Orange	Thermo Fisher Scientific	C10045	Red fluorescent plasma membrane stain
Succinimidyl ester of pHrodo	Thermo Fisher Scientific	P36600	Amine-reactive succinimidyl ester of pHrodo
Mouse (IgG2b) monoclonal (clone HIR2) anti-human CD235a	Thermo Fisher Scientific	MA1-20893	Used to opsonize human red blood cells with IgG
Alexa Fluor 594-conjugated goat anti-mouse (secondary) IgG antibody	Abcam	Ab150116	Used to confirm opsonization of human red blood cells with mouse IgG
Rat anti-mouse C3b/iC3b/C3c antibody	Hycult Biotech	HM1065	Used to confirm C3b/iC3b opsonization of human red blood cells
Alexa Fluor 488-conjugated goat anti-rat IgG antibody	Thermo Fisher Scientific	A-11006	Used as secondary antibody to confirm C3b/iC3b opsonization
Calcein/AM	Thermo Fisher Scientific	C3100MP	Used to load human red blood cells with Calcein
UltraVIEW Vox 3D live cell imaging system	Perkin Elmer, Rodgau, Germany		Spinning disk confocal microscope system
Nikon Eclipse Ti inverse microscope	Nikon, Japan		Inverted microscope

CSU-X1 spinning disk scanner	Yokogawa Electric Corporation, Japan		Nipkow spinning disk unit
14-bit Hamamatsu C9100-50 Electron Multiplying-Charged Couple Device (EM-CCD) peltier-cooled camera	Hamamatsu Photonics Inc., Japan		EM-CCD camera of the spinning disk confocal microscope system
488 nm solid state laser, 50 mW	Perkin Elmer, Rodgau, Germany		Laser (488 nm) source of spinning disk confocal microscope system
561 nm solid state laser, 50 mW	Perkin Elmer, Rodgau, Germany		Laser (561 nm) source of spinning disk confocal microscope system