

Materials List for:

Adhesion Frequency Assay for *In Situ* Kinetics Analysis of Cross-Junctional Molecular Interactions at the Cell-Cell Interface

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Materials

Name	Company	Catalog Number	Comments
10x PBS	BioWhittaker	17-517Q	Dilute to 1x with deionized water prior to use
Vacutainer EDTA	BD Biosciences	366643	RBCs isolation
10ML PK100			
Histopaque 1077	Sigma-Aldrich	10771	RBCs isolation
Adenine	Sigma-Aldrich	A2786	EAS-45 preparation
D-glucose (dextrose)	Sigma-Aldrich	G7528	EAS-45 preparation
D-Mannitol	Sigma-Aldrich	6360	EAS-45 preparation
Sodium Chloride (NaCl)	Sigma-Aldrich	S7653	EAS-45 preparation
Sodium Phosphate, Dibasic (Na ₂ HPO ₄)	Fisher Scientific	S374	EAS-45 preparation
L-glutamine	Sigma-Aldrich	G5763	EAS-45 preparation
Biotin-X-NHS	Calbiochem	203188	RBCs biotinylation
Dimethylformamide (DMF)	Thermo Fisher Scientific, Inc.	20673	RBCs biotinylation
Borate Buffer (0.1M)	Electron Microscopy Sciences	11455-90	RBCs biotinylation
Streptavidin	Thermo Fisher Scientific, Inc.	21125	Ligand functionalizing
BSA	Sigma-Aldrich	A0336	Ligand functionalizing
Quantibrite PE Beads	BD Biosciences	340495	Density quantification
Flow cytometer	BD Biosciences	BD LSR II	Density quantification
Capillary Tube 0.7-1.0mm x 30"	Kimble Chase	46485-1	Micropipette pulling
Mineral Oil	Fisher Scientific	BP2629-1	Chamber assembly
Microscope Cover Glass	Fisher Scientific	12-544-G	Chamber assembly
PE α-human CD11a Clone HI 111	eBioscience	12-0119-71	Reagent for Fig.1
PE anti-human CD54	eBioscience	12-0549	Reagent for Fig.1
Mouse IgG1 Isotype Control PE	eBioscience	12-4714	Reagent for Fig.1
hydraulic micromanipulator	Narishige International	MO-303	Micropipette system
Mechanical manipulator	Newport Corp.	461-xyz-m, SM-13, DM-13	Micropipette system
piezo-electric translator	Physik Instruments	P-840	Micropipette system
LabVIEW	National Instruments	Version 8.6	Micropipette system
DAQ board	National Instruments	USB-6008	Micropipette system
Optical table	Kinetic Systems	5200 Series	Micropipette system