

Materials List for

Single-Molecule Measurement of Protein Interaction Dynamics within Biomolecular Condensates

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jove.com/video/66169

Materials

Name	Company	Catalog Number	Comments
0.1 μm TetraSpeck microsphere	Invitrogen	T7279	Single-molecule imaging
25 mm Diameter, #1.5 Coverslips	Marienfeld Superior	111650	Preparation of coverslips
593/40 nm bandpass filter	Semrock	FF01-593/40-25	Single-molecule imaging
676/37 nm bandpass filter	Semrock	FF01-676/37-25	Single-molecule imaging
6-Well TC Plate	Genesee	25-105MP	Preparation of cells for microscopy
Cell Line: U-2 OS	ATCC	HTB-96	Labeling of proteins in cells
ConvertASCII_SlowTracking_css3.m			Analysis of single-molecule imaging data: Available in Chong et al., 2018
Coverglass Staining Rack	Thomas	24957	Preparation of coverslips
Deuterated Janelia Fluor 549 (JFX549)	Janelia Research Campus		Preparation of cells for microscopy
DMEM, Low Glucose	Gibco	10-567-022	Labeling of proteins in cells: Growth media used: DMEM with 5% fetal bovine serum, 1% penstrep
Eclipse Ti2-E Inverted Microscope	Nikon		Single-molecule imaging
Ethanol 200 Proof	Lab Alley	EAP200-1GAL	Preparation of coverslips
evalSPT			Analysis of single-molecule imaging data: Available in Drosopoulos et al., 2020
Fetal Bovine Serum	Cytiva	SH30396.03	Labeling of proteins in cells: Growth media used: DMEM with 5% fetal bovine serum, 1% penstrep
Fiji			Analysis of single-molecule imaging data
Ikon Ultra CCD Camera	Andor	X-13723	Single-molecule imaging
Longpass dichroic beamsplitter	Semrock	Di02-R635-25x36	Single-molecule imaging: Red/Far Red beamsplitter
LUN-F Laser Unit	Nikon		Single-molecule imaging: 405/488/561/640
MatTek glass-bottom dish	MatTek	P35G-1.5-20-C	Preparation of cells for microscopy: 35 mm, #1.5 coverslip dish for cell culture.

NIS-Elements	Nikon		Single-molecule imaging: Microscope acquisition software
nucleus and cluster mask_v2.txt			Analysis of single-molecule imaging data: Available in Chong et al., 2018
Penicillin-Streptomycin	Gibco	15-140-122	Labeling of proteins in cells: Growth media used: DMEM with 5% fetal bovine serum, 1% penstrep
Phosphate Buffered Saline	Thermo Fisher Scientific	18912014	Labeling of proteins in cells
Photoactivatable Janelia Fluor 646 (PA-JF646)	Janelia Research Campus		Preparation of cells for microscopy
PLOT_ResidenceHist_css.m			Analysis of single-molecule imaging data: Available in Chong et al., 2018
Potassium Hydroxide	Mallinckrodt Chemicals	6984-06	Preparation of coverslips
pretracking_comb.txt			Analysis of single-molecule imaging data: Available in Chong et al., 2018
SLIMfast			Analysis of single-molecule imaging data: Available in Teves et al., 2016
Stage-top incubation system	Tokai Hit		Single-molecule imaging: For live-cell imaging
TwinCam dual emission image splitter	Cairn Research		Single-molecule imaging
Ultrasonic Cleaner	Branson	5800	Preparation of coverslips