

Materials List for:

Single-molecule Super-resolution Imaging of Phosphatidylinositol 4,5-bisphosphate in the Plasma Membrane with Novel Fluorescent Probes

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Materials

Name	Company	Catalog Number	Comments
Microscope	Nikon	Ti-U	
sCMOS camera	Andor	Neo	
Spinning disk	Yokogawa	CSU X-1, 10,000 rpm	
High Power Monolithic Laser Combiner SP with 405, 488, 561 and 642 nm lasers.	Agilent	MLC400	laser original powers & powers at the end of optical fiber) 405 nm: 15 mW & 13 mW; 488 nm: 45 mW & 42 mW; 561 nm: 45 mW & 40 mW; 640 nm: 35 mW & 16 mW.
100X Objective	Nikon		APO 100X Oil, NA 1.49, WD 0.12 mm
Nikon acquisition and analysis software (NIS Element)	Nikon		
Matlab	MathWorks		
Coverslip	Warner	64-0714	Round 18 mm coverslip, #1.5
Fibronectin	Millipore	FC010-5MG	
Lipofectamin 3000 (transfection reagent)	Invitrogen	L3000-008	
Glutaraldehyde	Electron Microscopy Science	#16120	
PI(4,5)P ₂ 1 st antibody	Santa Cruz	sc-53412	
secondary antibody F(ab') ₂ -goat-anti-mouse Alexa Fluor 647	Invitrogen	A-21237	
Tetraspeck beads	Invitrogen	T7279	
magnetic quick release imaging chamber	Warner Instruments	Cat#641994	
temperature controller	Warner Instruments	TC-344C	
Poly-D-Lysine	Sigma	P6407	
Phosphate buffer saline	Sigma	P4417-100TAB	
EGTA	Sigma	3780	
NH ₄ Cl	Sigma	A0171	
Goat serum	Sigma	G9023	
bovine serum albumin	Sigma	A7906	
NaCl	Sigma	S5886	
KCl	Sigma	P5405	
CaCl ₂ •2H ₂ O	Sigma	223506	
MgCl ₂ •6H ₂ O	Sigma	M9272	
Glucose	Sigma	G7021	

HEPES	Sigma	H4034	
Paraformaldehyde	Sigma	P6148	