

Materials List for

pH Modulation Assay on Supported Lipid Bilayers to Detect Protein-Phosphoinositide Interactions

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URL: <https://www.jove.com/video/21445>

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Materials

Name	Company	Catalog Number	Comments
1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine	Avanti Polar Lipids	850457C	POPC
L- α -phosphatidylinositol-4-phosphate	Avanti Polar Lipids	840045X	PI4P
L- α -phosphatidylinositol-4,5-bisphosphate	Avanti Polar Lipids	840046X	PI(4,5)P2
1-palmitoyl-2-oleoyl-sn-glycero-3-phosphoethanolamine	Avanti Polar Lipids	850757C	POPE; Required for the synthesis of α SRB-POPE
Lissamine Rhodamine B Sulfonyl Chloride (mixed isomers)	ThermoFisher Scientific	L-20	Required for the synthesis of α SRB-POPE
pH-Sensitive Fluorescent Lipid Probe (α SRB-POPE)	In-house	N/A	In-house Synthesis (Huang D. et al. 2013)
Axiovert 200M Epifluorescence Microscope	Carl Zeiss Microscopy	N/A	Microscope
AxioCam MRm Camera	Carl Zeiss Microscopy	N/A	Camera
X-Cite 120	Excelitas Technologies	N/A	Light Source
Alexa 568 Filter Set	Carl Zeiss Microscopy	N/A	Ex/Em 576/603 nm
AxioVision LE64 v.4.9.1.0 Software	Carl Zeiss Microscopy	N/A	Image-Processing Software
Tips	VWR	10034-132	200 μ L pipette tips; Thin and smooth tip for applying the protein solution into the microfluidic channel
Tips	VWR	53509-070	10 μ L pipette tips; Thin and smooth tip for applying the vesicle solution into the microfluidic channel
Orion Star A321 pH meter	Thermo Scientific	STARA3210	pH meter
Orion micro pH probe	Thermo Scientific	8220BNWP	micro pH probe
N-(2-Hydroxyethyl)-Piperazine-N'-(2-Ethanesulfonic Acid)	VWR	VWRB30487	HEPES, Free Acid
Sodium Chloride	VWR	BDH8014-2.5KGR	NaCl
Tubing	Allied Wire & Cable	TFT-200-24 N	Internal Diameter: 0.020-0.026 inches (0.051-0.066 cm); Wall Thickness: 0.010 inches (0.025 cm); Flexible Polytetrafluoroethylene Thin-Wall Tubing; Natural Color
Nitrogen Gas - Industrial	Praxair	N/A	Local Provider
Oxygen Gas - Industrial	Praxair	N/A	Local Provider
Liquid Nitrogen	Praxair	N/A	Local Provider