

A Thermoplasmonic Approach for Investigating Plasma Membrane Repair in Living Cells and Model Membranes

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Materials

Name	Company	Catalog Number	Comments
1064 nm trapping laser	Spectra Physics	N/A	Spectra Physics J201-BL-106C, Nd: YVO4 NIR laser
160 nm Gold Nanoshells	NanoComposix	NCXGSIR150	
200 nm Gold Nanoparticles	BBI Solutions	EM.GC200/7	
35 mm glass surface MatTex microwell	MATTEK	P35G-1.5-14-C	
Amber-glass vials	Supelco Sigma Aldrich	243438	
Annexin A2 plasmids	N/A	N/A	Received from our collaborator at the Danish Cancer Research Center
Annexin A4 recombinant-protein	N/A	N/A	N-terminal GFP tagged ANXA4 received from our collaborator at the Danish Cancer Research Center
Annexin A5 recombinant-protein	N/A	N/A	N-terminal GFP tagged ANXA5 received from our collaborator at the Danish Cancer Research Center
beta-casein	Sigma Life Science	C6905-1G	
CaCl ₂	Suprlco (sigma Aldrich)	10035-04-8	
Centrifuge 5702	Eppendorf	5702	
Chloroform	VWR Chemicals	67-66-3	
Culture dish (Nunclon Delta Surface)	Thermo scientific	150460	
DID cell-labelling Solution	Invitrogen	7757	
Distilled water	Gibco	15230-089	
DOPC	Avanti Polar Lipids	850375C	Dissolved in chloroform
DOPS	Avanti Polar Lipids	840035C	Dissolved in chloroform
Dulbecco's Modified Eage's Medium	Thermo Fisher Scientific	11995065	
FIJI ImageJ distribution	ImageJ2	N/A	
GCaMP6s-CAAX		N/A	Received from our collaborator at the Danish Cancer Research Center
Gibco Fetal Bovine Serum	Fisher Scientific	11573397	10% of the culture medium
Glucose	PROLABO	24 374.297	

Hamilton syringes	Hamilton Company	N/A	50 and 500 microliters
Harrick Plasma Cleaner PDG-002	Harrick Plasma	N/A	
HEK293T cells		N/A	Received from our collaborator at the Danish Cancer Research Center
Leica Acousto-Optical Beam Splitter (AOBS)	Leica	N/A	
Leica PL APO 63x water immersion objective, NA = 1.2	Leica	N/A	
Leica SP5 confocal scanning microscope	Leica	N/A	
Lipofectamine	Fisher Scientific	15338030	
MatLab	The Mathworks, Inc., Natick, Massachusetts, United States	N/A	
NaCl	VWR Chemicals	7647-14-5	
Opti-MEM Reduced-Serum Medium	Thermo Fisher Scientific	11058021	
Parafilm	Bemis	PM-992	
Penicillin-Streptomycin	Thermo Fisher Scientific	15140122	1% of the culture medium
Phosphate Buffered Saline (PBS)	Thermo Fisher Scientific	10010023	
Piezoelectric stage (PI 731.20)	Physik Instrumente (Germany)	N/A	
Poly-L-Lysine	Sigma-Aldrich	P8920-100ML	0.01-0.1% for coating
Polyvinyl alcohol	Sigma-Aldrich	363065-25G	
round glass slide 25 mm Ø	VWR	631-1584	
Sonicator Brandson 2800	Brandson	N/A	
sucrose	Sigma Life Science	57-50-1	
T25 tissue culture flask	Falcon	353108	Blue Vented cap
Tris-HCl	Invitrogen	15567-027	
TrypLE	Thermo Fisher Scientific	A1285901	
Trypsin-EDTA	Fisher Scientific	11590626	
VWR Mixer mini vortex 230V EU	VWR	12620-84	ECN: 444-2790, SN: 150713022