

Materials List for:

# Ground State Depletion Super-resolution Imaging in Mammalian Cells

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URL: <https://www.jove.com/video/56239>

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## Materials

Name	Company	Catalog Number	Comments
KOH	Thermo Scientific	P250-500	To clean coverglass
#1.5 coverglass 18 x 18 mm	Marienfeld Superior	0107032)	To grow/process/image cells
10x PBS	Thermo Scientific	BP3994	Dilute to 1x with de-ionized water
Poly-L-Lysine	Sigma	P4832	Aids with cell adhesion to cover glass
laminin	Sigma	114956-81-9	Aids with cell adhesion to cover glass
Medium 199	Thermo Scientific	11150-059	Ventricular myocyte culture media
DMEM 11995	Gibco	11995	Cell culture media
Fetal bovine Serum (FBS)	Thermo Scientific	10437028	Media supplement
Penicillin/streptomycin	Sigma	P4333	Media supplement
0.05% trypsin-EDTA	Corning	25-052-CL	Cell culture solution
Lipofectamine 2000	Invitrogen	11668-019	Transient transfection reagent
Ca <sup>2+</sup> -free PBS	Gibco	1419-144	Cell culture
100 % Methanol	Thermo Fisher Scientific	A414-4	Cell Fixation
Paraformaldehyde	Electron Microscopy Sciences	15710	Cell Fixation
Glutaraldehyde	Sigma Aldrich	SLBR6504V	Cell Fixation
SEAblock	Thermo Scientific	37527	BSA or other blocking solution alternatives exist
Triton-X 100	Sigma	T8787	Detergent to permeabilize cells
Rabbit anti-CaV1.2 (FP1)	Gift	N/A	Commercial anti-CaV1.2 antibodies exist such as Alomone Labs Rb anti-CaV1.2 (ACC-003)
Mouse monoclonal anti-RFP	Rockland Inc.	200-301-379	Primary antibody
Alexa Fluor 647 donket anti-rabbit IgG (H+L)	Invitrogen (Thermo Scientific)	A31573	Secondary antibody
Alexa Fluor 568 goat anti-mouse IgG (H+L)	Invitrogen (Thermo Scientific)	A11031	Secondary antibody
Sodium azide	Sigma	S2002	Prevents microbial growth for long term storage of samples
Catalase	Sigma	C40	Photoswitching buffer ingredient
Glucose oxidase	Sigma	G2133	Photoswitching buffer ingredient
Tris	Sigma	T6066	Photoswitching buffer ingredient
beta-Mercaptoethylamin hydrochloride	Fisher	BP2664100	Photoswitching buffer ingredient
β-mercaptoethanol	Sigma	63689	Photoswitching buffer ingredient
NaCl	Fisher	S271-3	Photoswitching buffer ingredient
Dextrose	Fisher	D14-212	Photoswitching buffer ingredient

Glass Depression slides	Neolab	1 – 6293	To mount samples
Twinsil	Picodent	13001000	To seal coverglass
sec61 $\beta$ -mCherry plasmid	Addgene	49155	
Leica SR GSD 3D microscope	Leica		
ImageJ			
Washing block solution			20 % SEAblock in PBS
Primary antibody incubation solution			0.5 % Triton-X100, 20 % SEAblock, in PBS
Secondary antibody incubation solution			1:1000 in PBS