

Materials List for

Proximity Ligation Assay to Study In Situ Protein-Protein Interactions

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Materials

Name	Company	Catalog Number	Comments
16% paraformaldehyde solution	Electron Microscopy services	15710	Used to make 4% working solution
1M KH₂PO4	Sigma	P0662	Prepare a 1M working stock
1x M9	Various	various	Prepared as 10x stock used at 1x; see wormbook.org for protocol
1x PBS	Various	various	see wormbook.org for protocol
26.5-Gauge Needle	Exel International	26402	Needles used for dissection
BSA	Lampire	7500802	
Centrifuge Tubes	Thermo Scientific	05-529C	50ml Oak ridge centrifuge tube used for synchronization
Confocal Microscope	Zeiss	880	
Coplin Jar	PolyLab	62101	
Coverslip to Freeze Sample	Globe Scientific	1411-10	22x40mm, No. 1
Coverslip to Seal Slide	Globe Scientific	1404-15	22x22mm, No. 1.5
DAPI Mounting Medium for Immunofluorescence	Vector	H-1200	
Ligase	Sigma-Aldrich	DUO82029	Duolink 1x Ligase, Comes as part of the Duolink In Situ Detection Reagents Red kit DUO92008
Amplification red buffer	Sigma-Aldrich	DUO82011	Duolink 5x Amplification Red buffer, Comes as part of the Duolink In Situ Detection Reagents Red kit DUO92008
Ligation Buffer	Sigma-Aldrich	DUO82009	Duolink 5x Ligation buffer, Comes as part of the Duolink In Situ Detection Reagents Red kit DUO92008
Antibody Diluent	Sigma-Aldrich	DUO82008	Duolink antibody diluent, Comes with DUO92004 and DUO92002, Note: A 1x PBS/1% BSA solution can also be used as a substitute to dilute the antibody.
Blocking Solution	Sigma-Aldrich	DUO82007	Duolink blocking solution, Comes with DUO92004 and DUO92002
Mounting Medium for PLA	Sigma-Aldrich	DUO82040	Duolink In Situ mounting medium with DAPI
MINUS Probe	Sigma-Aldrich	DUO92004	Duolink In Situ Probe Anti-Mouse MINUS
PLUS Probe	Sigma-Aldrich	DUO92002	Duolink In Situ Probe Anti-Rabbit PLUS
Wash Buffer A	Sigma-Aldrich	DUO82046	Duolink In Situ wash Buffer A
Wash Buffer B	Sigma-Aldrich	DUO82048	Duolink In Situ wash Buffer B
Polymerase	Sigma-Aldrich	DUO82030	Duolink Polymerase, Comes as part of the Duolink In Situ

			Detection Reagents Red kit
Epifluorescent Microscope	Leica		DFC300G camera, DM5500B microscope
Goat anti-mouse Alexa 594	JacksonImmuno	115-585-146	Use at 1:500
Goat anti-rabbit Alexa 488	JacksonImmuno	111-545-144	Use at 1:200
Glass Pipette	Corning	7095B-5X	1
Levamisole	ACROS Organics	187870100	Prepare a 250mM working stock
Methanol	Fisher Scientific	A454	
Mouse anti-FLAG	Sigma	F1804	Use at 1:1000 for immunofluorescence and PLA, pre-block with normal goat serum recommended
Nailpolish	L.A. colors	CNP195	
Nematode Growth Medium (NGM)	Various		See wormbook.org for protocol
Normal Goat Serum	JacksonImmuno	005-000-121	
Polyethylene Pasteur Pipette	Globe Scientific	135030	
Poly-L-Lysine	Sigma-Aldrich	P1524	Prepared as 0.1% stock solution in water, stored at -20C, and diluted 1:100 in water to coat slides
Petri Dishes	Tritech	PD7060	60 mm diameter
Rabbit anti-GFP	Thermo Fisher	G10362	Use at 1:200 for immunofluorescence, 1:4000 for PLA
Slides	Thermo Fisher	30-2066A-Brown	Three-square 14x14mm autoclavable slides with bars are custom-ordered through Fisher Scientific. Poly-L-Lysine added to slides in the lab
Sodium Hypochlorite solution	Fisher Scientific	SS290-1	
Task wipes	Kimtech	34120	4.4x8.4 inch task wipes
Trays (242x241x20mm)	Thermo Fisher	240845	Used to make humid chamber
Triton X-100	ACROS Organics	327372500	
Ultrapure water	Milli-Q		Ultrapure water obtained from Milli-Q Integral Water Purification System
Watchglass	Carolina Biological	742300	
-20 °C freezer			
-80 °C freezer			
Aluminum Foil			
OP50 strain E. coli			
Orbital Shaker			
Таре			
Nematode strains used in this study (both available upon request)			
mntSi13[pME4.1] II; unc-119(ed3) III; tels1 [pRL475]		UMT 376	dlc-1 prom::3xFLAG::dlc-1::dlc-1 3'UTR; oma-1 prom::oma-1::GFP; Reference 24
mntSi13[pME4.1] II; mntSi21[pXW6.22] unc-119(ed3) III		UMT 422	dlc-1 prom::3xFLAG::dlc-1::dlc-1 3'UTR; gld-1 prom::ceGFP::fbf-1 3'UTR + unc-119(+); Reference: this study