

Materials List for:

Functional Calcium Imaging in Developing Cortical Networks

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Materials

Name	Company	Catalog Number	Comments
Solutions			
CaCl ₂	Sigma Aldrich	22,350-6	
Choline chloride	Sigma	C7527	
cremaphor	Fluka	27963	Cremophor EL®
DMSO (Dimethyl sulfoxide)	Sigma Aldrich	472301	
D-glucose	Sigma Aldrich	16325	
Fura-2 AM	Invitrogen	F-1221	special packaging
KCl	Sigma Aldrich	60130	
MgCl ₂	Fluka	63072	
NaCl	Sigma Aldrich	31434	
NaHCO ₃	Sigma Aldrich	31437	
NaH ₂ PO ₄	Merck	106346	
Pluronic® F-127	Invitrogen	P-3000MP	20% solution in DMSO
sodium ascorbate	Sigma	A7631	
sodium pyruvate	Sigma Aldrich	P2256	
Lectin from <i>Lycopersicon esculentum</i> (tomato)	Sigma	L0401	
Sulforhodamine 101 acid chloride	Sigma	S3388	
Poly(ethyleneimine) solution	Fluka	P3143	
boric acid	Sigma	B6768	
Sodium tetraborate decahydrate	Sigma	B3545	
PEI			
Staining chamber			
Syringe (5 or 10 ml)	Terumo		with luer lock
Cell Culture Inserts for 6-well plates, 8.0 µm, transparent PET membrane	BD Falcon™	353093	
Petri dish (35 and 100mm)			disposable, polystyrene
tubing and connectors			
super glue			
HOLDERS and Chambers			
Slice holder			submerged
Staining chamber			interface chamber
recording chamber			e.g. MEA probes
Imaging setup			

Titanium Sapphire laser (Chameleon)	Coherent		
Trim Scope	LaVision		64 beams
Microscope	Leica		High NA lense