

Materials List for:

# Neuromodulation and Mitochondrial Transport: Live Imaging in Hippocampal Neurons over Long Durations

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## Materials

Name	Company	Catalog Number	Comments
(1) Tissue culture incubator (H)			
(1) Heat-resistant plastic enclosure (A)			(delrin or comparable)
(1) Plastic frame for 35mm GBM lid (M)			(for affixing membrane to petri dish)
(1-2) linear ft. Clear PTFE (Teflon)			membrane material
(4) Brass thumb screws			
(2) Small 10kOhm heatsink resistors			used as heating elements inside stage-top incubator enclosure
(1) Transformer			supply of 9V current to resistors
(1) Terrarium temperature controller and probe			thermostatic regulation of power to heatsink resistors via transformer
(1) 2000ml Erlenmeyer flask (K)			muffler for vibration suppression in hose before stage-top incubator
(1) 1/8" sorbothane sheet			gasket material for base of stage-top incubator
(1) Airtight ABS (or comparable) plastic box (J)			housing for aquarium pump
(1) Aquarium pump (I)			
(1) Small computer cooling fan			
(1) Plastic enclosure for cooling fan (L)			
(1) 9V transformer for computer cooling fan			
(20-30ft) Nalgene or silicone hose (F,G,N)			connections between tissue culture and stage-top incubators; moisture traps
(2) Plastic stopcocks (O)			to open and close air flow before and after stage-top incubator
(4) Barbed brass hose connectors			for hose connections to/from stage-top incubator and aquarium pump enclosure
(2) Brass quick couplers			for hose connections to/from stage-top incubator
(2) Brass quick couplers			for hose connections to/from stage-top incubator

**Table 1. Stage-top incubator parts:**

Poly-D-lysine	Sigma-Aldrich	P7280-5MG	
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laminin	Roche Group	11243217001	
35 mm glass-bottom dishes	MatTek Corp.	P35GC-0-14-C	
DMEM	Life Technologies	10567	
B27	Life Technologies	17504-044	
Glutamax	Life Technologies	35050	
Lipid-rich BSA	Life Technologies	11020-021	
L-Asparagine	Sigma-Aldrich	P0380-100G	
L-Proline	Sigma-Aldrich	A8381-100G	
Vitamin B-12	Sigma-Aldrich	V2876-100MG	
5-HT	Sigma-Aldrich	H9523-25MG	
8-OH-DPAT	Sigma-Aldrich	H8520-25MG	
Dopamine	Sigma-Aldrich	H8502-5G	
Bromocriptine	Sigma-Aldrich	B2134-25MG	
SKF38393	Sigma-Aldrich	D047-100MG	