

Planarian Scrunching as a Quantitative Behavioral Readout for Noxious Stimuli Sensing

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jove.com/video/61549

Materials

Name	Company	Catalog Number	Comments
Allyl isothiocyanate, 95% (AITC)	Sigma-Aldrich	377430-5G	CAUTION: Flammable and acutely toxic; handle in a fume hood with appropriate PPE.
Camera lens, 2/3 25mm F/1.4	Tamron	23FM25SP	
Cell culture plates, 6 well, tissue culture treated	Genesee Scientific	25-105	
Centrifuge tubes, 50 mL polypropylene, sterile	MedSupply Partners	62-1019-2	
Cinnamaldehyde, >95%	Sigma-Aldrich	W228613-100G-K	
Dimmable A4 LED Tracer Light Box	Amazon	B07HD631RP	
Flea3 USB3 camera	FLIR	FL3-U3-13E4M	
Heat resistant gloves	Fisher Scientific	11-394-298	
Hot plate	Fisher Scientific	HP88854200	
Instant Ocean Sea Salt, prepared in deionized water	Instant Ocean	SS15-10	Prepare in deionized water at 0.5 g/L.
Montjüic salts, prepared in Milli-Q water	Sigma-Aldrich	various	Prepare in milli-Q water at 1.6 mM NaCl, 1.0 mM CaCl ₂ , 1.0 mM MgSO ₄ , 0.1 mM MgCl ₂ , 0.1 mM KCl, 1.2 mM NaHCO ₃ ; adjust pH to 7.0 with HCl.
Petri dishes, 100 mm x 20 mm, sterile polystyrene	Simport	D210-7	
Pipette, 20-200 µL range	Rainin	17008652	
PYREX 150 mL beaker	Sigma-Aldrich	CLS1000150	
Razor blade, 0.22 mm	VWR	55411-050	
Roscolux color filter: Golden Amber	Rosco	R21	Alternatively purchase the Roscolux Designer Color Selector (Musson Theatrical product #SBLUX0306) which includes all 3 color filters together.
Roscolux color filter: Medium Red	Rosco	R27	
Roscolux color filter: Storaro Red	Rosco	R2001	

Samco transfer pipette, 62 μ L large aperture	Thermo Fisher	691TS	
Support stand	Fisher Scientific	12-947-976	
Thermometer	VWR	89095-600	
UV laser pointer	Amazon	B082DGS86R	This is a Class II laser (405nm \pm 10nm) with output power <5 mW.