

Materials List for:

# Quantitative Measurement of the Immune Response and Sleep in *Drosophila*

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## Materials

Name	Company	Catalog Number	Comments
<b>Equipment</b>			
Incubators	Percival Scientific, Inc.	I30BLLC8 I36VLC8	Any incubator capable of running programmed light/temperature schedules is appropriate.
<i>Drosophila</i> Activity Monitors	Trikinetics Inc., Waltham, MA	DAM2	As described elsewhere <sup>6</sup> , this system requires a computer interface, software, and other accessories.
Pyrex Glass Tubes	Trikinetics Inc., Waltham, MA	PGT-5x65	
Microplate scintillation and luminescence counter	Perkin Elmer	TopCount NXT 12 detector	Any microplate reader capable of detecting luminescence can be used for this type of reporter assay. TopCount contains multiple detectors and an automated stacker; it is capable of being programmed to read continuously from multiple plates.
FluorChem 8900	Alpha Innotech		Imaging of bacterial cultures is optional; any digital imaging system with visual light capability is sufficient.
Micropipette Puller	Tritech Research, Inc.	Narishige PC-10	
<b>Supplies</b>			
Borosilicate Glass Capillaries	World Precision Instrument Inc.	1B100F-4	
3 ml Syringe	Fisher Scientific	BD 305482	
Syringe Needles	Fisher Scientific	BD 305196	18 G - cut off the tip of the needle to prevent damage to the tubing.
Silicone Tubing, i.d. (0.030") o.d. (0.065") Wall Thickness (0.018")	VWR	60985-706	Used for attaching glass capillary needles to a syringe
3 Way Stopcock	American Pharmaseal Company	K75	
Kontes Pellet Pestle Cordless Motor	Fisher Scientific	K749540-0000	
Kontes Pellet Pestle	Fisher Scientific	K749521-1590	
Glass balls 3mm	VWR	26396-630	
Microplate Microlite 1+	Thermo Scientific	7571	Select 96-well plates that are appropriate for luminescence - they must be opaque.
TopSeal-A:96-well Microplates	PerkinElmer	6005185	Microplate Press-On Adhesive Sealing Film
D-Luciferin, Potassium Salt	Gold BioTechnology, Inc.	LUCNA	
<b>Software</b>			

Insomniac2	Available upon request to the authors	custom; written by Lesley Ashmore, Ph.D. (Westminster College)	Matlab based software that has been used routinely for analysis of sleep <sup>2,6,11</sup>
Drosonex	Available upon request to the authors	custom; written by Thomas Coradetti (Sidewalk Software)	A PC MSVC6 program used for survival analysis from raw data files collected with the Trikinetics system
Photoshop CS3	Adobe		Useful for obtaining numbers of cfu/plate from digital images (optional)