

Visualizing Monocarboxylates and Other Relevant Metabolites in the *Ex Vivo Drosophila* Larval Brain Using Genetically Encoded Sensors

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Materials

Name	Company	Catalog Number	Comments
Agarose	Sigma	A9539	
CaCl ₂	Sigma	C3881	
CCD Camera ORCA-R2	Hamamatsu	-	
Cell-R Software	Olympus	-	
CG-GAL4	Bloomington Drosophila Stock Center	7011	Fat body driver
Dumont # 5 Forceps	Fine Science Tools	11252-30	
DV2-emission splitting system	Photometrics	-	
Glass coverslips (25 mm diameter)	Marientfeld	111650	Germany
Glucose	Sigma	G8270	
GraphPad Prism	GraphPad Software	Version 8,0,2	
HEPES	Sigma	H3375	
ImageJ software	National Institutes of Health	Version 1,53t	
KCl	Sigma	P9541	
LUMPlanFI 40x/0.8 water immersion objective	Olympus	-	
Methylparaben	Sigma	H5501	
MgCl ₂	Sigma	M1028	
NaCl	Sigma	S7653	
OK6-GAL4	Bloomington Drosophila Stock Center		Motor neuron driver
Picrotoxin	Sigma	P1675S	CAUTION-Fatal if swallowed
Poly-L-lysine	Sigma	P4707	
Propionic Acid	Sigma	P1386	

Repo-GAL4	Bloomington Drosophila Stock Center	7415	Glial cell driver (all)
Sodium Lactate	Sigma	71718	
Sodium pyruvate	Sigma	P2256	
Spinning Disk fluorescence Microscope BX61WI	Olympus	-	
Sucrose	Sigma	S0389	
Trehalose	US Biological	T8270	
UAS-AT1.03NL	Kyoto Drosophila Stock Center	117012	ATP sensor
UAS-Chk RNAi GD1829	Vienna Drosophila Resource Center	v37139	Chk RNAi line
UAS-FLII ¹² Pglu700md6	Bloomington Drosophila Stock Center	93452	Glucose sensor
UAS-GCaMP6f	Bloomington Drosophila Stock Center	42747	Calcium sensor
UAS-Laconic	Sierralta Lab	-	Lactate sensor
UAS-Pyronic	Pierre Yves Placais/Thomas Preat	-	CNRS-Paris
UMPlanFI 20x/0.5 water immersion objective	Olympus	-	