

Materials List for:

Analysis of Actomyosin Dynamics at Local Cellular and Tissue Scales Using Time-lapse Movies of Cultured *Drosophila* Egg Chambers

Ivana Viktorinová^{1,2}, Robert Haase^{*1,2}, Tobias Pietzsch^{*1,2}, Ian Henry^{1,2}, Pavel Tomancak^{1,2}

¹Max Planck Institute of Molecular Cell Biology and Genetics

²Center for Systems Biology Dresden

*These authors contributed equally

Correspondence to: Ivana Viktorinová at iviktorinova@hotmail.com

URL: <https://www.jove.com/video/58587>

DOI: [doi:10.3791/58587](https://doi.org/10.3791/58587)

Materials

Name	Company	Catalog Number	Comments
Schneider Medium	Gibco	21720-024	[+]-Glutamine
Penicillin/Streptomycin	Gibco	15140-122	[+] 10.000 Units/mL Penicillin [+] 10.000 µg/mL Streptomycin
Fetal Bovine Serum	Sigma	F135	Heat inactivated
Insulin Solution Human	Sigma	I9278	
50 mL Falcon tubes	Eppendorf		sterile
Millex-GV filter	Millipore	SLGV033NS	33 mm
Glass Bottom Microwell Dishes	MatTek Corporation	P35G-1.5-14-C	35 mm Petri dish, 14 mm Microwell, No. 1.5 cover glass
Forceps	A. Dumont & Fils		#55
CellMask Deep Red (cell membrane dye)	Invitrogen	C10046	
FM4-64 (cell membrane dye)	ThermoFisher/Invitrogen	T13320	
Depression dissection slide	Fisher Scientific	12-560B	
Microscopic equipment			
Steromicroscope	e.g. Zeiss		Stemi SV 6
Inverted confocal microscope	e.g. Zeiss/Olympus		
Spinning disc microscope	e.g. Zeiss/Andor		
Microscopic glass/cover glass	e.g. Thermo Scientific/Menzel Glas		
Cactus tool			
Wironit needle holder	Hammacher	9160020	
Cactus spine	Echinocactus grusonii/barrel cactus		
<i>Drosophila</i> stocks used in the manuscript			
<i>AX³/AX³; sqh-MRLC::GFP/sqh-MRLC::GFP</i>			For detail see Rauzi et al.: Planar polarized actomyosin contractile flows control epithelial junction remodeling. Nature 2010, Vol. 468, pg. 1110-1115.
<i>AX³/AX³; sqh-MRLC::GFP/sqh-MRLC::GFP; fat2^{58D}/fat2^{103C}</i>			For detail see Viktorinova et al.: Epithelial rotation is preceded by planar symmetry breaking of actomyosin and protects epithelial tissue from cell deformations. PLoS Genetics 2017, Vol. 13, Issue 11, pg. e1007107.