

Materials List for:

Analysis of Lipid Droplet Content in Fission and Budding Yeasts using Automated Image Processing

Jarmila Princová¹, Martin Schätz¹, Ondřej Ťupa¹, Martin Převorovský¹

¹Faculty of Science, Charles University

Correspondence to: Martin Převorovský at prevorov@natur.cuni.cz

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Materials

Name	Company	Catalog Number	Comments
12-bit monochromatic CCD camera Hamamatsu ORCA C4742-80-12AG	Hamamatsu		or equivalent
Adenine hemisulfate salt, ≥99%	Merck	A9126-25G	
BODIPY 493/503 (4,4-Difluoro-1,3,5,7,8-Pentamethyl-4-Bora-3a,4a-Diaza-s-Indacene)	Thermo Fisher Scientific	D3922	for neutral lipid staining
D-(+) - Glucose, ≥99.5%	Merck	G7021	
Dextran, Cascade Blue, 10,000 MW, Anionic, Lysine Fixable	Thermo Fisher Scientific	D1976	for negative staining of cells
Dimethyl sulfoxide, ≥99.5%	Merck	D4540	or higher purity, keep anhydrous on molecular sieves
EMM broth without dextrose	Formedium	PMD0405	medium may also be prepared from individual components
Fiji/ImageJ software	NIH		or equivalent; for visual inspection of microscopic data
High precision cover glasses, 22x22 mm, No 1.5	VWR	630-2186	use any # 1.5 cover glass
Image Processing Toolbox for MATLAB, version 10.0	Mathworks		
Lectin from Glycine max (soybean)	Merck	L1395	for cell immobilization on slides
MATLAB software, version 9.2	Mathworks		
Microscope slide, 26 x 76 mm, 1 mm thickness	Knittel Glass	L762601.2	use any microscope slide fitting your microscope stage, clean thoroughly before loading cells
Olympus CellR microscope with automatic z-axis objective movement	Olympus		or equivalent
pentaband filter set	Semrock	F66-985	brightfield, green and blue channels are sufficient
Signal Processing Toolbox for MATLAB, version 7.4	Mathworks		
SP supplements	Formedium	PSU0101	
standard office computer capable of running MATLAB			
Statistics and Machine Learning Toolbox for MATLAB, version 11.1	Mathworks		
Universal peptone M66 for microbiology	Merck	1070431000	
UPLSAPO 60XO objective	Olympus		or equivalent

Yeast extract	Formedium	YEA03	
Yeast nitrogen base without amino acids	Formedium	CYN0405	