

Materials List for:

Reconstruction of Single-Cell Innate Fluorescence Signatures by Confocal Microscopy

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Materials

Name	Company	Catalog Number	Comments
Agarose	Wako Chemicals	312-01193	
Beam splitters	Carl Zeiss, Nikon		MBSInVis405, MBS458, MBS488, MBS458/514, MBS488/543, or MBS 488/543/633 beam splitters (Carl Zeiss)
Confocal microscope	Carl Zeiss, Nikon		Model LSM 880 (Carl Zeiss), Model A1R (Nikon)
Cover slips	Matsunami Glass	C024601	
Glass slides	Matsunami Glass	S011120	
Half-reflection mirror	Carl Zeiss, Nikon		NT80/20
Laser power meter	Thorlabs		PM400 (power meter console) and S175C (sensor)
LB Broth	Nacalai tesque	20066-95	For bacteria culture
Image analysis software	The MathWorks		MATLAB version 2019a or later, Image Processing Toolbox is needed
Microscope objective	Carl Zeiss, Nikon	440762-9904	e.g. 63x plan Apochoomat NA = 1.4 (Carl Zeiss)
Microscope software	Carl Zeiss, Nikon		ZEN (Carl Zeiss),NIS-elements (Nikon)
PBS(-)	Wako Chemicals	166-23555	
Programming language			Python and libraries, modules (numpy, scikit-learn, scikit-image, os, glob, matplotlib, tkinter) are required to run the supplied PCA script.
Silicone gasket	ThermoFisher Scientific	P24744	
Workstation			A high-performance workstation with discrete GPUs is recommended.
Yeast extract-peptone-dextrose (YPD) agar medium	Sigma-Aldrich	Y1500-250G	For yeast culture
YPD medium	Sigma-Aldrich	Y1375-250G	