

Confocal Laser Scanning Microscopy-Based Quantitative Analysis of *Aspergillus fumigatus* Conidia Distribution in Whole-Mount Optically Cleared Mouse Lung

Ivan V. Maslov¹, Andrey O. Bogorodskiy¹, Mariia V. Pavelchenko¹, Iliia O. Zykov¹, Natalya I. Troyanova², Valentin I. Borshchevskiy^{1,3}, Marina A. Shevchenko²

¹Research Center for Molecular Mechanisms of Aging and Age-Related Diseases, Moscow Institute of Physics and Technology ²Department of Immunology, Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences ³Institute of Biological Information Processing (IBI-7: Structural Biochemistry), Forschungszentrum Jülich

Corresponding Authors

Valentin I. Borshchevskiy

borshchevskiy.vi@phystech.edu

Marina A. Shevchenko

mshevch@gmail.com

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Materials

Name	Company	Catalog Number	Comments
Alexa Fluor 594 NHS Ester	ThermoFisher	A20004	
<i>Aspergillus fumigatus</i> conidia	ATCC	46645	The strain AfS150, a ATCC 46645 derivative
Benzyl alcohol	Panreac	141081.1611	98.0-100 %
Benzyl benzoate	Acros	AC10586-0010	99+%
C57Bl/6 mice	Pushchino Animal Breeding Centre (Russia)		Male. 12 - 30 week old.
Catheter	Venisystems	G715-A01	18G
Cell imaging coverglass-bottom chamber	Eppendorf	30742028	4 or 8 well chamber with coverglass bottom
Centrifuge	Eppendorf	5804R	Any centrifuge provided 1000 g can be used
Confocal laser scanning microscope	ZEISS	ZEISS LSM780	
Dimethyl sulfoxide	Sigma-Aldrich	276855	≥99.9%
FIJI image processing package	FIJI		Free software
Forcep	B. Braun Aesculap	BD557R	Toothed
Forcep	B. Braun Aesculap	BD321R	Fine-tipped
Forcep	Bochem	1727	Smooth
Glass bottle	DURAN	242101304	With ground-in lid
Graphic Editor Photoshop	Adobe Inc		Adobe Photoshop CS
GraphPad Software	GraphPad		Prism 8
Imaris Microscopy Imaging Software	Oxford Instruments		Free trial is available https://imaris.oxinst.com/microscopy-imaging-software-free-trial

Isoflurane	Karizoo		
NaHCO ₃	Panreac	141638	
Objective	ZEISS	420640-9800-000	Plan-Apochromat, 10 × (NA = 0.3)
Paraformaldehyde	Sigma-Aldrich	158127	
PBS	Paneco	P060Π	
Pipette	ProLine	722020	5 to 50 µL
Powdered milk	Roth	T145.2	
Sample mixer	Dynal	MXIC1	
Scissors	B. Braun	BC257R	Blunt
Shaker	Apexlab	GS-20	50-300 rpm
Skalpel	Bochem	12646	
Silk thread	B. Braun		3 USP
Streptavidin, Alexa Fluor 488 conjugate	ThermoFisher	S11223	
Test tube	SPL Lifesciences	50050	50 mL
Tris (hydroxymethyl aminomethane)	Helicon	H-1702-0.5	Mr 121.14; CAS Number: 77-86-1
Triton X-100	Amresco	Am-O694-0.1	
ZEN microscope software	ZEISS	ZEN2012 SP5	https://www.zeiss.com/microscopy/int/products/microscope-software/zen.html