

Materials List for:

# A Rapid Automated Protocol for Muscle Fiber Population Analysis in Rat Muscle Cross Sections Using Myosin Heavy Chain Immunohistochemistry

Konstantin D. Bergmeister<sup>1,3</sup>, Marion Gröger<sup>2</sup>, Martin Aman<sup>1</sup>, Anna Willensdorfer<sup>1</sup>, Krisztina Manzano-Szalai<sup>1</sup>, Stefan Salminger<sup>1</sup>, Oskar C. Aszmann<sup>1</sup>

<sup>1</sup>CD Laboratory for the Restoration of Extremity Function, Division of Plastic and Reconstructive Surgery, Department of Surgery, Medical University of Vienna

<sup>2</sup>Core Facility Imaging, Core Facilities, Medical University Vienna

<sup>3</sup>Department of Hand, Plastic and Reconstructive Surgery, Burn Center, BG Trauma Center Ludwigshafen, Plastic and Hand Surgery, University of Heidelberg

Correspondence to: Oskar C. Aszmann at [oskar.aszmann@meduniwien.ac.at](mailto:oskar.aszmann@meduniwien.ac.at)

URL: <https://www.jove.com/video/55441>

DOI: [doi:10.3791/55441](https://doi.org/10.3791/55441)

## Materials

Name	Company	Catalog Number	Comments
O.C.T compound	Tissue-Tek, Sakura, Netherlands		For embedding of muscle tissue
Isopentane			for adequate freezing of muscle tissue
Superfrost Ultra Plus slides	Thermo Scientific, Germany	1014356190	adhesive slides
phosphate buffered saline			
Triton X-100	Thermo Scientific, Germany	85112	Detergent Solution
Goat serum	Thermo Scientific, Germany	50197Z	Goat Serum
DAKO Fluorescent Mounting Medium	Dako Denmark	S3023	
Dako pen	Dako Denmark	S200230-2	
TissueFAXSi plus	TissueGnostics, Vienna, Austria		
<b>Primary antibodies</b>			
MHC-I (Cat# BA-F8, RRID: AB_10572253)	Developmental Studies Hybridoma Bank (DSHB, Iowa, USA)		Supernatant
MHC-IIa (Cat# SC-71, RRID: AB_2147165)	Developmental Studies Hybridoma Bank (DSHB, Iowa, USA)		Supernatant
MHC-IIb (Cat# BF-F3, RRID: AB_2266724)	Developmental Studies Hybridoma Bank (DSHB, Iowa, USA)		Supernatant
<b>Secondary antibodies</b>			
Alexa Fluor 633 Goat Anti-Mouse IgG2b	Thermo Scientific, Germany	A-21146	
Alexa Fluor 488 Goat Anti-Mouse IgG1 (γ1)	Thermo Scientific, Germany	A-21121	
Alexa Fluor 555 Goat Anti-Mouse IgM (μ chain)	Thermo Scientific, Germany	A-21426	
NucBlue Fixed Cell ReadyProbes Reagent	Thermo Scientific, Germany	R37606	