Materials List for

Intact Short, Intermediate, and Long Skeletal Muscle Fibers Obtained by Enzymatic Dissociation of Six Hindlimb Muscles of Mice: Beyond Flexor Digitorum Brevis

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Materials

Name	Company	Catalog Number	Comments
Reagents			
Absolute ethanol	Sigma Aldrich	32221	
Acetone	Merck	179124	
Acrylamide	Gibco BRL	15512-015	
Ammonium persulfate	Panreac	141138.1610	
Anti myosin I antibody	Sigma Aldrich	M4276	Primary antibody
Anti myosin II antibody	Sigma Aldrich	M8421	Primary antibody
Anti myosin IIA antibody	American Type Culture Collection	SC-71	Primary antibody. Derived from HB-277 hybridoma
Anti myosin IIB antibody	Developmental Studies Hybridoma Bank	BF-F3-c	Primary antibody
Bis-acrylamide	AMRESCO	0172	
Bovine serum albumin	Thermo Scientific	B14	
Bradford reagent	Merck	1.10306.0500	
Bromophenol blue	Carlo Erba	428658	
Calcium carbonate	Merck	102066	
Calcium dichloride ($CaCl_2$)	Merck	2389	
Chloroform	Sigma Aldrich	319988	
Collagenase type 2	Worthington	CLS-2/LS004176	
Consul-Mount	Thermo Scientific	9990440	
Coomassie Brilliant blue R 250	Merck	112553	
Dimethyl sulfoxide (DMSO)	Sigma Aldrich	D2650	
Dithiothreitol (DTT)	AMRESCO	0281	

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Edetic acid (EDTA	AMRESCO	0322	
Eosin Y	Sigma Aldrich	E4009	
Glycerol	Panreac	1423291211	
Glycine	Panreac	151340.1067	
Goat serum	Sigma Aldrich	G9023	
Hematoxylin	Thermo Scientific	6765015	
HEPES	AMRESCO	0511	
Hoechst 33258	Sigma Aldrich	861405	
Imidazole	AMRESCO	M136	
Isopentane	Sigma Aldrich	M32631	
Laminin	Sigma Aldrich	L2020	
Mag-Fluo-4, AM	Invitrogen	M14206	Prepared only in DMSO. Pluronic acid is not required and should not be used to avoid fiber deterioration.
Mercaptoethanol	Applichem	A11080100	
Methanol	Protokimica	MP10043	
Mice	Several	Several	For this manuscript, we only used C57BL/6 mice. However, some preliminary results have shown that the protocol works well for Swiss Webster mice of the same age and weight.
Mowiol 4-88	Sigma Aldrich	81381	
N,N,N',N'-tetramethylethane-1,2-diamine (TEMED)	Promega	V3161	
N-benzyl-p-toluene sulphonamide (BTS)	Tocris	1870	
Optimal cutting compound (OCT)	Thermo Scientific	6769006	
Secondary antibody	Thermo Scientific	A-11001	Goat anti-mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 488
Sodium dodecil sulfate	Panreac	1323631209	
TRIS 0.5 M, pH 6.8	AMRESCO	J832	
Tris(Hydroxymethyl)aminomethane	AMRESCO	M151	
Triton X-100	AMRESCO	M143	
Materials			
Dissection chamber	Custom-made		
Charged slides	Erie Scientific	5951PLUS	
Experimental bath chamber	Warner Instruments	RC-27NE2	Narrow Bath Chamber with Field Stimulation, ensembled on a heated platform PH-6
Fine forceps	World Precision Instruments	500338, 500230	
Fine scissors	World Precision Instruments	Vannas Scissors 501778	
Glass Pasteur pipettes	Several		Fire-polished tips
Glass vials with cap	Several		2-3 mL volumen
Operating scissors	World Precision Instruments	501223-G	
Equipment			
Centrifuge	Thermo Scientific	SL 8R	
Confocal microscope	Olympus	FV1000	
Cryostat	Leica	CM1850	
Digital camera	Zeiss	Erc 5s and Axio 305	Axio 305, coupled to the Stemi 508 stereoscope, was used to take pictures during dissection; while Erc

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			5s or Axio 208, coupled to the Axio Observer A1 microscope, were used to take images of the isolated fibers and the immunofluorescence assays
Digitizer	Molecular Devices	1550A Digidata	
Electrophoresis chamber	Bio Rad	Mini-Protean IV	
Inverted microscope coupled to fluorescence	Zeiss	Axio Observer A1	Coupled to an appropriate light source, filters and objectives for fluorescence
Photomultiplier	Horiba	R928 tube, Hamamatsu, in a D104 photometer, Horiba	Coupled to the lateral port of the fluorescence microscope
Stereoscope	Zeiss	Stemi 508	
Stimulator	Grass Instruments	S6	
Water bath	Memmert	WNE-22	
Xilol	Sigma Aldrich	808691	
Software			
Free software for electrophoreses analyses	University of Kentucky	GelBandFitter v1.7	http://www.gelbandfitter.org
Free software for image analysis and morphometry	National Institutes of Health	ImageJ v1.54	https://imagej.nih.gov/ij/index.html
Licensed software for Ca^{2+} signals acquisition and analyses	Molecular Devices	pCLAMP v10.05	https://www.moleculardevices.com
Licensed software for statistical analyses and graphing	OriginLab	OriginPro 2019	https://www.originlab.com/

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