

Materials List for:

Skeletal Muscle Gender Dimorphism from Proteomics

Kalina Dimova¹, Lauren Ann Metskas², Mohini Kulp³, Stylianos P. Scordilis⁴

¹Center for Proteomics, Smith College

²Department of Molecular Biophysics and Biochemistry, Yale University

³Department of Chemistry, Smith College

⁴Department of Biological Sciences and Center for Proteomics, Smith College

Correspondence to: Stylianos P. Scordilis at sscordil@smith.edu

URL: <https://www.jove.com/video/3536>

DOI: [doi:10.3791/3536](https://doi.org/10.3791/3536)

Materials

Name	Type	Company	Catalog Number	Comments
PepClean C-18 Spin Columns	Consumable	Thermo Fisher Scientific, Inc.	PI-89870	
Pepswift monolithic column (100um x 5 cm)	Consumable	Dionex	162348	
Criterion pre-cast 10.5%-14% Tris-HCl SDS polyacrylamide gels	Consumable	Bio-Rad	345-0106	
ReadyStrip IPG strips	Consumable	Bio-Rad	Varying pH ranges	
Acetic acid	Reagent	Fisher Scientific	A465-1	
Acetone	Reagent	Pharmco Products, Inc.	329000	
Acetonitrile	Reagent	Fisher Scientific	A955	
Agarose	Reagent	Bio-Rad	163-2111	Overlay solution
Ammonium bicarbonate	Reagent	Fluka	40867	
Bromophenol blue	Reagent	Fisher Scientific	BP114	
Bio-Lyte Ampholytes	Reagent	Bio-Rad		Varying pH ranges
CHAPS	Reagent	USB Corp., Affymetrix	13361	
Commassie blue R-250	Reagent	Thermo Fisher Scientific, Inc.	20278	
Dithiothreitol (DTT)	Reagent	USB Corp., Affymetrix	15395	
Formic acid	Reagent	Thermo Fisher Scientific, Inc.	28905	
Glycerol	Reagent	Sigma-Aldrich	G6279	
Glycine	Reagent	USB Corp., Affymetrix	16407	
Iodoacetamide	Reagent	Sigma-Aldrich	I6125	
Methanol	Reagent	Fisher Scientific	A452	
Mineral oil	Reagent	Bio-Rad	163-2129	
Sodium dodecyl sulfate	Reagent	Sigma-Aldrich	L6026	
Tris base	Reagent	Sigma-Aldrich	93349	
Tris[2-carb-xyethyl] phosphine	Reagent	Thermo Fisher Scientific, Inc.	77720	
Trypsin Endoproteinase, TPCK treated, MS grade	Reagent	Pierce, Thermo Scientific	90055	modified
Urea	Reagent	USB Corp., Affymetrix	75826	
Water	Reagent	Burdick & Jackson	365	

Centrivap Concentrator	Tool	Labconco Corp.		
Exquest spot cutter	Tool	Bio-Rad		
LCQ Deca XP Max ion trap mass spectrometer	Tool	Thermo Fisher Scientific, Inc.		
Motorized pestle	Tool	Kontes Corp		
Polypropylene stirring rods		Biospec Products		
PROTEAN IEF cell	Tool	Bio-Rad		
Sonicator	Tool	Branson		
Surveyor Plus HPLC system	Tool	Thermo Fisher Scientific, Inc.		
VersaDoc imaging system	Tool	Bio-Rad		