

Materials List for

# Shotgun Proteomics Sample Processing Automated by an Open-Source Lab Robot

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jove.com/video/63092

## Materials

Name	Company	Catalog Number	Comments
300 µL pipette tips	Opentrons		
4-in-1 tube rack set	Opentrons		Each set includes 2 base stands and 4 tube holder tops 1.5mL, 2mL, 15mL + 50mL, 15mL, and 50mL. We use 2mL and 15 mL + 50 mL tops in this study.
Acclaim PepMap 100 C18 HPLC Column	Thermo Scientific	#164568	3 µm particle; 100 Å pore; 75 µm x 150 mm
Acetonitrile LC-MS grade	VWR	#JT9829	
Aluminum block set	Opentrons		This block set includes 3 tops that are compatible with 96-well, 2.0 mL tubes and a PCR strip to use with the OT-2 temperature module. We use the 2.0mL tube holder in this manuscript.
Ammonium Bicarbonate	Sigma-Aldrich	# A6141	
Bovine Serum Albumin Standard, 2 mg/mL	Thermo Scientific	#23210	
Dimethylsulfoxide (DMSO) LC-MS grade	Thermo Scientific	#85190	
Dithiothreitol	Sigma-Aldrich	#D5545	
EASY-Spray HPLC Columns	Thermo Scientific	#ES800A	
EasynLC 1200 Nano LC	Thermo Scientific	#LC140	
Ethanol Proof 195-200	Fisher	#04-355-720	
Formic Acid LC-MS grade	Thermo Scientific	#85178	
Human heart lysate	Novus Biologicals	NB820-59217	
Iodoacetamide	Sigma-Aldrich	#I1149	
Magnetic tube rack	Thermo Scientific	#MR02	
MAXQuant v.1.6.10.43			Tyanova et al., 2016 ( <a href="https://www.maxquant.org/">https://www.maxquant.org/</a> )

mySPIN 6 Mini Centrifuge	Thermo Scientific	#75004061	benchtop mini centrifuge for quick spin
NEST 2 mL 96-Well Deep Well Plate, V Bottom	Opentrons		
OT-2 magnetic module	Opentrons		GEN1
OT-2 P300 single channel pipette	Opentrons		GEN1
OT-2 P50 single channel pipette	Opentrons		GEN1
OT-2 robot pipetting robot	Opentrons	OT-2	
OT-2 temperature module	Opentrons		GEN1
Pierce Quantitative Colorimetric Peptide Assay	Thermo Scientific	#23275	
Protein LoBind tubes 2.0 mL	Eppendorf	#022431102	
Protein Sequence Database	UniProt/SwissProt		<a href="https://www.uniprot.org/uniprot/?query=proteome:UP000005640%20reviewed:yes">https://www.uniprot.org/uniprot/?query=proteome:UP000005640%20reviewed:yes</a>
Sera-Mag SpeedBead Carboxylate-Modified Magnetic Particles, Hydrophobic	Cytiva	#65152105050250	
Sera-Mag SpeedBead Carboxylate-Modified Magnetic Particles, Hydrophilic	Cytiva	#45152105050250	
SpeedVac	Thermo Scientific		Vacuum evaporator
Thermo Q Exactive HF Mass Spectrometer	Thermo Scientific	#IQLAAEGAAPFALGMBFZ	
Trypsin MS Grade	Thermo Scientific	#90057	
Water LC-MS grade	VWR	#BDH83645.400	