

Materials List for:

# Benchtop Immobilized Metal Affinity Chromatography, Reconstitution and Assay of a Polyhistidine Tagged Metalloenzyme for the Undergraduate Laboratory

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## Materials

Name	Company	Catalog Number	Comments
consumables			
BeadBeater 0.1mm glass beads	BioSpec Products	11079101	1 pound each
50mL Conical Tubes with Screw Caps, sterile	VWR	21008-178	
Sodium chloride	Fisher Bioreagents	BP358-1	
Potassium phosphate, monobasic	Acros (Fisher)	AC42420-5000	
Sodium Ascorbate	Acros (Fisher)	AC35268-1000	
DTT (Dithiothreitol)	Lab Scientific	D-115	
Iron(II) sulfate heptahydrate	Sigmaaldrich	310077	
HisPur NiNTA Resin	Fisher (Pierce)	PI88221	
Econo-Column Chromatography Columns - 1.5 x 20cm	Bio-Rad	737-1522	1.5 x 20 cm, 35 ml, 2ea,
Stopcock Valve, one way, female to male luer	Kimble	420163-0000	pack of 50
BD 10mL luer-loc syringe (non-sterile, without needle)	VWR	301029	
Fitting for tubing: 1.6 mm Barb to Female Luer	Biorad	7318222	
Fitting for tubing: 1.6 mm Barb to Male Luer	Biorad	7318225	
Silicon Tubing (1.6 mm ID/0.8 mm wall, for 0.2-5 ml/min on Peristaltic Pump)	Bio-Rad	7318211	Pkg of 1, 1.6 mm ID/0.8 mm wall, 10 m, low-pressure tubing for liquid handling
Glycerol	Fisher (Pierce)	17904	
Coomassie Plus (Bradford) Protein Assay	Thermo Scientific	23236	
Microcentrifuge Tubes, snap cap, 1.5mL	VWR	89000-028	
Fisherbrand polystyrene disposable serological pipets	Fisher	13-676-10F	
Fisherbrand universal pipet pump	Fisher	14-955-110	
Fisherbrand Transfer Pipets	Fisher	13-711-9AM	
Econo-Pac 10DG desalting columns	Bio-Rad	732-2010	box of 30
ExpressPlus PAGE 5x sample buffer	Genscript	MB01015	5mL (Dilute 1:5 with sample)

ExpressPlus PAGE Gel, 4-20%, 12 wells	Genscript	M42012	20 gels
Fisherbrand Disposable Cuvettes, Methacrylate	Fisher	14-955-128	case of 500
Cuvette Caps Square Disposable	Fisher	14-385-999	
L-DOPA (3,4-dihydroxyphenylalanine)	Acros	D9628-5G	
Permanent Equipment:			
BeadBeater 50mL chamber	BioSpec Products	110803-50SS	1 chamber
BeadBeater	BioSpec Products	1107900-101	350 ml polycarbonate chamber, rotor assembly, motor base, ice-water cooling jacket and one pound of glass beads.
Centrifuge tubes, High-Speed PPCO, 50mL	Fisher	3119-0050PK	
Mini-PROTEAN Tetra Vertical Electrophoresis Cell for Mini Precast Gels, 4-gel	Bio-Rad	1658004	4-gel vertical electrophoresis system, includes electrode assembly, companion running module, tank, lid with power cables, mini cell buffer dam
PowerPac HC Power Supply	Bio-Rad	1645052	100–120/220–240 V, power supply for high-current applications, includes power cord
UV-1800 with UV-Probe Software	Shimadzu	UV-1800	
Kintek Global Kinetic Explorer	Kintek Corp	version 6	<a href="https://www.kintekexplorer.com/downloads/">https://www.kintekexplorer.com/downloads/</a>