

Materials List for:

Hybrid Clear/Blue Native Electrophoresis for the Separation and Analysis of Mitochondrial Respiratory Chain Supercomplexes

Alexanne Cuillerier¹, Yan Burelle¹

¹Interdisciplinary School of Health Science, Faculty of Health Sciences and Department of Cellular and Molecular Medicine, Faculty of Medicine, University of Ottawa

Correspondence to: Yan Burelle at yburell2@uottawa.ca

URL: <https://www.jove.com/video/59294>

DOI: [doi:10.3791/59294](https://doi.org/10.3791/59294)

Materials

Name	Company	Catalog Number	Comments
3,3'-Diaminobenzidine tetrahydrochloride hydrate	Sigma	D5637	
6-amino caproic acid	sigma	A2504	
Acrylamide	Sigma	A3553	
Adenosine 5'-triphosphate disodium salt hydrate	sigma	A3377	
Anti-ATPB antibody [3D5] - Mitochondrial Marker	Abcam	ab14730	Lot number GR3174539-12, RRID AB_301438
Anti-SDHA antibody [2E3GC12FB2AE2]	Abcam	ab14715	Lot number GR3235943-1, RRID AB_301433
Anti-UQCRC2 antibody [13G12AF12BB11]	Abcam	ab14745	Lot number GR304308-3, RRID AB_2213640
Bis N,N'-Methylene-Bis-Acrylamide	Biorad	1610201	
Brilliant Blue G	Sigma	27815	
COX4 Monoclonal Antibody (1D6E1A8)	Invitrogen	459600	Lot number TI2637158, RRID AB_2532240
Cytochrome c from equine heart	sigma	C7752	
Digitonin	Sigma	D141	
Fisherbrand FH100M Multichannel Peristaltic Pumps	Thermo Fisher	13-310-660	
Imidazole	Sigma	I0250	
Inner Glass Plates. Pkg of 2, 20 x 20 cm, glass plates for 20 cm PROTEAN II xi and PROTEAN II XL electrophoresis cells, use with outer plate	Biorad	1651823	
Model 485 Gradient Former. 40-175 ml acrylamide gradient former, includes valve stem and tubing kit, for use with Mini-PROTEAN multi-casting chamber systems	Biorad	1654120	
NDUFA9 Monoclonal Antibody (20C11B11B11)	Invitrogen	459100	Lot number TD2536591, RRID AB_2532223
Nitrotetrazolium Blue chloride	Sigma	N6639	
Outer Glass Plates. Pkg of 2, 22.3 x 20 cm, glass plates for 20 cm PROTEAN II xi and PROTEAN II XL electrophoresis cells, use with inner plate	Biorad	1651824	
Phenylmethanesulfonyl fluoride	Sigma	P7626	

Powerpack 1000	Biorad	Serial Number 286BR 07171	
PROTEAN II Sandwich Clamps. Pkg of 2, clamps for running gels, for 20 cm PROTEAN II xi electrophoresis cell, 1 left and 1 right	Biorad	1651902	
PROTEAN II xi Cell. Large format vertical electrophoresis cell, 16 x 20 cm gel size, 4 gel capacity, spacers and combs	Biorad	1651811	
PROTEAN II xi Comb. Pkg of 1, 15-well, 1.5 mm, comb for PROTEAN II xi electrophoresis cell	Biorad	1651873	
PROTEAN II xi Multi-Gel Casting Chamber. Multi-gel casting chamber, 20 x 20 cm gel size, for up to ten 1.5 mm thick gels, includes sealing plate, gasket, separation sheets, acrylic blocks, PROTEAN II XL alignment cards	Biorad	1652025	
PROTEAN II xi Spacers. Pkg of 4, 1.5 mm, spacers for 20 cm PROTEAN II xi electrophoresis cell	Biorad	1651849	
SCIENCEWARE Utility Bags (10 x 12") 4 mil, Bel-Art, Box of 100	VWR	11215-388	
Thick Blot Paper. Pkg of 25 sheets, 15 x 20 cm, absorbent filter paper, for use with Trans-Blot cassette	Biorad	1703956	
Trans-Blot Cell With Plate Electrodes and Super Cooling Coil. Transfer cell and cooling coil (#170-3912), includes 2 gel holder cassettes, buffer tank, lid with cables, fiber pads, 1 pack blot paper	Biorad	1703939	