

Materials List for:

Preparation and Respirometric Assessment of Mitochondria Isolated from Skeletal Muscle Tissue Obtained by Percutaneous Needle Biopsy

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Materials

Name	Company	Catalog Number	Comments
Equipment			
Homogenizer Bio-Gen PRO200	BioExpress		
Eppendorf Centrifuge 5804 R	Fisher Scientific		
Deepwell late Rotor	Fisher Scientific		
6 mm University College Hospital Needle	Cadence		
60 cc syringe	Fisher Scientific		
96-well plate reader	Tecan (Genios-basic)		
Seahorse XF 24-3 analyzer	Seahorse Biosciences, Inc.		
Protein gel system	Life Technologies (Invitrogen)		
Kodak Gel Logic 112	Carestream Health, Inc		
Kodak camera assembly	Carestream Health, Inc		
Consumables			
XF24 V7 Cell Culture Microplate and XF24 sensor cartridge	Seahorse Bioscience	100850-001	
100867-100			
Potassium hydroxide (KOH)	Sigma-Aldrich Co	221473	
Hydrochloric acid (HCl)	Acros	12421-0010	
Dulbecco's Phosphate buffered saline	Lonza	17-512F	
Potassium chloride (KCl)	Fisher Scientific	P333	
MOPS	Fisher Scientific	BP308	
EDTA	Fisher Scientific	BP118	
Magnesium sulfate (MgSO ₄)	Sigma-Aldrich Co	M7506	
ATP	Sigma-Aldrich Co	A9187	
Fatty acid-free BSA	Calbiochem	126575	
Sucrose	Sigma-Aldrich Co	S0389	
Bacterial proteinase	Sigma-Aldrich Co	P-8038	
D-Mannitol	Sigma-Aldrich Co	M9546	
KH ₂ PO ₄	Fisher Scientific	P284	
Magnesium chloride (MgCl ₂)	Sigma-Aldrich Co	M9272	
HEPES	Sigma-Aldrich Co	H3784	
EGTA	Sigma-Aldrich Co	E3889	
BCA protein assay kit	Sigma-Aldrich Co	PI23227	

Succinic Acid*	Sigma-Aldrich Co	S3674	
Pyruvic acid*	Sigma-Aldrich Co	P5280	
Malic acid*	Sigma-Aldrich Co	2288	
ADP(K ⁺ salt)*	Sigma-Aldrich Co	A5285	
XF Cell mito stress test kit	Seahorse Biosciences	101706	
Tween-20	Santa Cruz Biotechnology, Inc.	SC-29113	
NuPAGE 12% Bis-Tris Gel	Life Technologies (Invitrogen)	NP0343BOX	
Immobilin Transfer Membranes (0.45 um)	Millipore	IPVH20200	
MOPS SDS Running Buffer (20X)-500 ml	Life Technologies (Invitrogen)	NP0001	
NuPAGE Transfer Buffer (20X)-1 liter	Life Technologies (Invitrogen)	NP0006-1	
Primary antibodies (mAB to VDAC1/Porin)	Abcam	ab14734	
Primary antibodies (mAB to GAPDH)	Abcam	ab9484	
Anti-Mouse IgG (Goat), HRP-labeled	PerkinElmer	NEF822E001EA	
Anti-Rabbit IgG (Goat), HRP-labeled	PerkinElmer	NEF812E001EA	
*ADP, succinic acid, pyruvic acid, and malic acid should be adjusted to pH 7.4 with KOH only			