

Materials List for:

Isolation of Mitochondria from Minimal Quantities of Mouse Skeletal Muscle for High Throughput Microplate Respiratory Measurements

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Materials

Name	Company	Catalog Number	Comments
Essentially Fatty	Sigma Aldrich	A6003	N/A
Acid Free- BSA			
Tris/HCl	Promega	H5123	N/A
KCL	Sigma Aldrich	P9541	N/A
Tris Base	Promega	H5135	N/A
EDTA	Sigma Aldrich	E6511	N/A
EGTA	Sigma Aldrich	E4378	N/A
Sucrose	Sigma Aldrich	S7903	N/A
D-Mannitol	Sigma Aldrich	63559	N/A
Trypsin-EDTA (0.25%), phenol red	Thermo Scientific	25200-056	N/A
Sodium Chloride White Crystals or Crystalline Powder ≥99.0 %	Fisher Scientific	BP3581	N/A
Sodium dodecyl sulfate	Sigma Aldrich	L3771	N/A
Sodium deoxycholate	Sigma Aldrich	D6750	N/A
Polyoxyethylene (12) nonylphenyl ether, branched	Sigma Aldrich	238651	N/A
Single Edge Razor Blades	Fisher Scientific	12-640	N/A
Falcon- 100 uM Nylon Cell Strainers	Fisher Scientific	352360	N/A
Halt Protease & Phosphatase Inhibitor Cocktail	Thermo Scientific	1861284	N/A
1.5 ml microcentrifuge tubes with screw cap	Thermo Scientific	3474	N/A
Zirconium Oxide beads	Fisher Scientific	C9012112	N/A
GAPDH antibody (1D4)	Santa Cruz Biotechnology	sc-59540	N/A
Anti- COXIV antibody	Cell Signaling	4844s	Any mitochondrial inner membrane protein will suffice
Peroxidase conjugated affinipure Donkey, Anti Rabbit IgG (H+L)	Jackson ImmunoResearch	711-035-152	N/A
Peroxidase conjugated affinipure Goat, Anti Mouse IgG (H+L)	Jackson ImmunoResearch	115-001-003	N/A
Triton-X100	Sigma Aldrich	X100	N/A

Pierce BCA Protein Assay Kit	Thermo Scientific	23225	N/A
Pyruvic Acid, 98%	Sigma Aldrich	107360	Store at 4 °C, pH to 7.4 with KOH prior to use in respirometric assay
Succinic Acid	Sigma Aldrich	S9512	Store at room temperature, pH to 7.4 with KOH prior to use in respirometric assay
L(-) Malic Acid, BioXtra, ≥95%	Sigma Aldrich	M6413	Store at room temperature, to 7.4 with KOH prior to use in respirometric assay
L-Glutamic acid	Sigma Aldrich	G1251	Store at room temperature, to 7.4 with KOH prior to use in respirometric assay, to 7.4 with KOH prior to use in respirometric assay
Palmitoyl L-carnitine chloride	Sigma Aldrich	P1645	Store at -20 °C
Oligomycin A, ≥ 95% (HPLC)	Sigma Aldrich	75351	Store at -20 °C
Carbonyl cyanide 4-(trifluoromethoxy) phenylhydrazone	Sigma Aldrich	C2920	Store at 2-8 °C
≥98% (TLC), powder [FCCP]			
Antimycin A from streptomyces sp.	Sigma Aldrich	A8674	Store at -20 °C
Adenosine 5'-diphosphate monopotassium salt dehydrate [ADP]	Sigma Aldrich	A5285	Store at -20 °C, to 7.4 with KOH prior to use in respirometric assay
Rotenone	Sigma Aldrich	R8875	Store at room temperature