

Oxygen-Independent Assays to Measure Mitochondrial Function in Mammals

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Materials

Name	Company	Catalog Number	Comments
1.5 mL tube	Cell Treat	667443	
2.0 mL tube	Cell Treat	229446	
6-well plate	Cell Treat	229106	
12-well plate	Cell Treat	229112	
¹³ C ₄ -aspartate	Sigma-Aldrich	604852	
¹³ C ₅ -Glutamine	Cambridge Isotope Laboratories	285978-14-5	
15 mL centrifuge tube	Cell Treat	667411	
50 mL centrifuge tube	Cell Treat	667421	
150 mm tissue culture dish	Cell Treat	229651	
1x Phosphate-buffered saline	Gibco	10010049	
2,6-dichlorophenolindophenol	Honeywell	33125	
Ammonium Carbonate	Sigma-Aldrich	37999	
Antimycin	Sigma-Aldrich	A8674	
Ascentis Express C18	Sigma-Aldrich	53825-U	
Bottle top filter 500 mL, 0.22 µm, PES 9 9 mm membrane diameter	Cell Treat	229717	
Bovine Serum Albumin	Sigma-Aldrich	A3294	
Brequinar	Sigma-Aldrich	SML0113	
Cell Lifter, Double End Flat and Narrow Blade	Cell Treat	229305	
CentriVap -105 Cold Trap	Labconco	7385020	
Complete Protease Inhibitor Tablets	Sigma-Aldrich	4693116001	
Coulter Counter Cups	Fisher Scientific	07-000-694	
Decylubiquinone	Sigma-Aldrich	D7911	
DMSO	Invitrogen	D12345	
Dulbecco's Modified Eagle Medium (DMEM)	Gibco	11995-065	

EDTA	Sigma-Aldrich	E6758	
EGTA	Sigma-Aldrich	E3889	
Eppendorf Centrifuge 5425R	Eppendorf	2231000908	
Eppendorf Centrifuge 5910 Ri	Eppendorf	5943000343	
Galactose	Sigma-Aldrich	G5388	
Glucose	Sigma-Aldrich	G7021	
Glucose-free DMEM	Gibco	11966025	
Glutamine-free DMEM	Thermo Fisher	11960044	
Heat-Inactivated Fetal Bovine Serum	Sigma-Aldrich	F4135	
Hepes	Sigma-Aldrich	H3375	
HPLC-grade 35% Ammonium hydroxide	Thermo Scientific	460801000	
HPLC-grade Acetonitrile	Sigma-Aldrich	900667	
HPLC-grade Chloroform	Sigma-Aldrich	366927	
HPLC-grade formic acid	Thermo Scientific	28905	
HPLC-grade Isopropanol	Sigma-Aldrich	563935	
HPLC-grade MeOH	Sigma-Aldrich	900688	
HPLC-grade Water	Sigma-Aldrich	270733	
Human Osteosarcome Cell Line 143B	ATCC	CRL-8303	
Hydrochloric Acid	Sigma-Aldrich	320331-500ML	
Isotone buffer	Beckman Coulter	8546719	
K ₂ HPO ₄	Sigma-Aldrich	P2222	
Mannitol	Sigma-Aldrich	M4125	
MitoSox Red	Invitrogen	M36008	
N-acetyl-L-cysteine	Sigma-Aldrich	A9165	
Oligomycin	Sigma-Aldrich	75351-5MG	
Pencillin Streptomycin	Gibco	15140-122	
Potter-Elvehjem Tissue Grinder, Size 21	Kimble	885502-0021	
Pyruvate	Sigma-Aldrich	P5280	
Pyruvate-free DMEM media	Gibco	11965175	
Q Exactive Plus Mass Spectrometer	Thermo Scientific	726030	
ReCO ₂ ver Incubator	Baker		
Refrigerated Centrivap Benchtop Vacuum Concentrator	Labconco	7310020	
RIPA Buffer	Millipore Sigma	20188	
Rotenone	Sigma-Aldrich	R8875	
SeQuant ZIC-pHILIC 5µm 150 x 2.1 mm analytical column	Sigma-Aldrich	1.50460.0001	
SeQuant ZIC-pHILIC guard kit	Millipore Sigma	1.50438.0001	
Sodium Hydroxide, Pellets	Millipore Sigma	567530-250GM	
Sucrose	Sigma-Aldrich	S0389	
SW, TRACEFINDER 5.1 SP3	Thermo Scientific	OPTON-31001	
Tert-butyl hydroperoxide solution	Sigma-Aldrich	458139	
Tris	Sigma-Aldrich	93352	
Trypsin-EDTA (0.25%), phenol red	Gibco	25-200-114	
Uridine	Sigma-Aldrich	U3003	
VANQUISH HORIZON / FLEX HPLC	Thermo Scientific	VF-S01-A-02	

Z2 Coulter Particle count and size analyzer	Beckman Coulter	BZ10131270	
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