

Materials List for:

Analyzing Oxygen Consumption Rate in Primary Cultured Mouse Neonatal Cardiomyocytes Using an Extracellular Flux Analyzer

Shizuko Tachibana¹, Chao Chen¹, Oliver R. Zhang¹, Sarah V. Schurr¹, Cameron Hill¹, Ruixia Li¹, Ana M. Manso¹, Jianlin Zhang¹, Aleksander Andreyev², Anne N. Murphy², Robert S. Ross^{1,3}, Yoshitake Cho¹

¹Division of Cardiology, Department of Medicine, University of California San Diego

²Department of Pharmacology, University of California San Diego

³Cardiology Section, Department of Medicine, Veterans Administration Healthcare, San Diego

Correspondence to: Yoshitake Cho at cyoshitake@ucsd.edu

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Materials

Name	Company	Catalog Number	Comments
Antimycin A	SIGMA	A8674	Inhibits complex III of the mitochondria
Cell strainer 100 µm pores	FALCON	352360	To capture undigested tissue
Collagenase type II	Worthington	LS004176	To make collagenase digestion solution
D-Glucose	SIGMA	75351	To make mitochondria stress test medium
DMEM high glucose	Life technologies	11965-092	To make cell culture medium
DMEM without NaHCO ₃ , Glucose, pyruvate, glutamine, and HEPES	SIGMA	D5030-10X1L	To make mitochondria stress test medium
FCCP (Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone)	SIGMA	C2920	Uncouples mitochondrial respiration
Fetal bovine serum (FBS)	Life technologies	26140-079	To make cell culture medium
Fibronectin from bovine plasma	SIGMA	F1141-5MG	To make coating solution for tissue culture plates
Fine scissors	Fine Sciences Tools	14060-10	For dissection of hearts
Gelatin from porcine skin	SIGMA	G-1890	To make coating solution for tissue culture plates
HBSS (Hank's balanced salt solution, without Ca ²⁺ , Mg ²⁺)	Cellgro	21-022-CV	To wash hearts and make pre-digestion and collagenase digestion solution
HEPES (1M)	Fisher scientific	15630080	To make mitochondria stress test medium
Horse serum	Life technologies	26050-088	To make cell culture medium
L-Glutamine	SIGMA	G-3126	To make mitochondria stress test medium
M-199	Cellgro	10-060-CV	To make cell culture medium
Moria spoon	Fisher scientific	NC9190356	To wash hearts
Oligomycin	SIGMA	75351-5MG	Inhibits mitochondrial ATP synthase
RIPA buffer	Fisher scientific	89900	To lyse the cells for protein assay
Rotenone	SIGMA	R8875	Inhibits complex I of the mitochondria
Seahorse XFe96 Extracellular Flux Analyzer	Agilent		Device used to analyze oxygen consumption rate

Seahorse XFe96 FluxPak	Agilent	102601-100	Package of flux analyzer culture plates, sensor cartridges, and calibrant
Sodium pyruvate	SIGMA	P2256	To make mitochondrial stress test medium
Straight scissors	Fine Sciences Tools	91401-12	For dissection of hearts
Syringe filter 0.2 µm size			For sterile filtration of digestion medium
Trypsin	USB Corporation	22715 25GM	To make pre-digestion solution