

Measurement of Oxygen Consumption Rate in Acute Striatal Slices from Adult Mice

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Materials

Name	Company	Catalog Number	Comments
Accumet AB150 pH benchtop meter	Thermo Fisher Scientific	13-636-AB150	To measure pH
Antimycin A from streptomyces sp.	SIGMA	A8674	To inhibit complex III of the mitochondria
Bovine Serum Albumin (BSA)	SIGMA	A6003	To make modified artificial cerebrospinal fluid (BSA-ACSF)
Carbonyl cyanide 4-(trifluoromethoxy) phenylhydrazone (FCCP)	SIGMA	C2920	To uncouple mitochondrial respiration
D-Glucose	SIGMA	G8270	To make artificial cerebrospinal fluid (ACSF)
DMSO	SIGMA	D8418	To dissolve compounds
HEPES	SIGMA	H3375	To make artificial cerebrospinal fluid (ACSF)
Humidified non-CO2 incubator	Fisher Scientific	11-683-230D	To hydrate plates at 37 °C
Oligomycin from Streptomyces diastatochromogenes	SIGMA	O4876	To inhibit mitochondrial ATP synthase
Parafilm	SIGMA-ALDRICH		sealing film
Rotenone	Tocris	3616	To inhibit complex I of the mitochondria
Seahorse XF Calibrant Solution 500 mL	Seahorse Bioscience	103681-100	Solution for seahorse calibration
Seahorse XF Extracellular Flux Analyzer	Seahorse Bioscience		Equipment used to analyze oxygen consumption rate, old generation
Seahorse XFe24 Extracellular Flux Analyzer	Seahorse Bioscience		Equipment used to analyze oxygen consumption rate, new generation
Seahorse XF24 FluxPaks	Seahorse Bioscience	101174-100	Package of flux analyzer sensor cartridges, tissue culture plates, capture screens, calibrant solution and calibration plates; assay kit.
Sodium pyruvate	SIGMA	P2256	To prevent any substrate-limiting constraints of substrate supply
Stainless steel biopsy punches	Miltex		Device used to punch slices

Sterile cell culture dish, 35 x 10 mm	Eppendorf	0030700102	Used for slice punch
Vibratome	Leica	VT1200	To slice brain tissue
Water bath	Thermo Scientific Precision	282-115	To heat buffer and solutions