

Materials List for:

Probing for Mitochondrial Complex Activity in Human Embryonic Stem Cells

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Materials

Name	Company	Catalog Number	Comments
0.5M EDTA	Fisher Scientific	BP120-1	adjust pH to 8.0 with NaOH
1M NaCl	Sigma-Aldrich	S3014-500MG	
1M Sodium succinate	Fisher Scientific	S413-500	
0.1M Sodium phosphate buffer pH 7.2	Fisher Scientific	BP332-1 and BP329-1	Mix 68.4 ml of 1M Na ₂ HPO ₄ and 31.6 ml of 1M NaH ₂ PO ₄ to prepare 0.1M sodium phosphate buffer with pH 7.2 at 25 C
1M Tricine, pH 7.0 (adjusted with NaOH)	EMD Millipore	9010	store at 4 C
1M imidazole/HCl, pH 7.0	Sigma-Aldrich	I-2399	store at 4 C
1M Tris-HCl, pH 7.4	Fisher Scientific	BP153-1	
20% (wt/vol) dodecyl-b-D-maltoside (DDM)	Fluka	44205-500MG	Dissolved in water. Store 1 ml aliquots at -20 C.
10% (wt/vol) digitonin (>50% purity, used without recrystallization)	Fluka	37008-1G	Dissolved in water. Store 0.1–1 ml aliquots at -20 C. Should be warmed up to 95 C before use.
2M 6-aminohexanoic acid	Fluka	07260-100G	store at 4 C
10x Ponceau S/glycerol stock solution	Sigma-Aldrich	P-3504 and G6279-1L	0.1% Ponceau S, 50% glycerol, (wt/vol) in water.
10% w/v sodium deoxycholate	Fluka	30970-25G	Dissolved in water. Must be protected from light. Adjust pH

			to 7.0 with HCl, filter and store at room temperature.
250 mM phenazine methasulfate (PMS)	TCI America	P0083	Dissolved in DMSO and aliquoted. Store at –20 C.
Nitro-blue tetrazolium (NBT)	Amresco	0329-1G	
3,3'-diaminobenzidine tetrahydrochloride (DAB)	TCI America	D0078	
Pb(NO ₃) ₂	Fisher Scientific	L62-100	
MgSO ₄	Fisher Scientific	BP213-1	
Tris base	Fisher Scientific	BP152-10	
Glycine	Fisher Scientific	G45-212	
Adenosine 5'-triphosphate disodium salt (ATP)	Sigma-Aldrich	A2383-5G	Grade I, minimum 99%
beta-nicotineamide adenine dinucleotide (NADH) reduced form	Sigma-Aldrich	N-8129	
Cytochrome c From horse heart	Sigma-Aldrich	C2506-250MG	
Sucrose	Fisher Scientific	BP220-212	
100x protease inhibitor cocktail	Sigma-Aldrich	P8340	Store at – 20 C.
Dimethyl sulfoxide (DMSO)	Fisher Scientific	D128-500	
Trypan blue Stain 0.4%	GIBCO, by Life Technologies	15250-061	
10x Trypsin (0.5%)	GIBCO, by Life Technologies	15400-054	
Trypsin Inhibitor	GIBCO, by Life Technologies	17075-029	