

Evaluation of Fatty Acid Oxidation in Cultured Bone Cells

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jove.com/video/63638

Materials

Name	Company	Catalog Number	Comments
[1- ¹⁴ C]-Oleic acid	Perkin Elmer	NEC317050UC	
15 x 30 mm rubber sleeve stoppers	VWR	89097-542	
1 mL syringe	BD precision	309628	
25 G needle (25 G x 1 1/2 in)	BD precision	305127	
Ascorbic Acid	Sigma Aldrich	A4403	
BCA Protein Assay Kit	Thermo Fisher	23225	Other kits are also suitable
Beckman Scintillation Counter, or equivalent	Beckman Coulter	LS6000SC	
Beta-glycerol phosphate	Sigma Aldrich	G6626	
Bovine Serum Albumin	Sigma Aldrich	126609	
Carnitine	Sigma Aldrich	C0283	
Cellular lysis buffer			The protocol is amenable to typical lysis buffers (i.e. RIPA)
Dissecting forceps			Available from multiple sources
DNA quantification Kit			Available from multiple sources
Dulbecco's Phosphate-Buffered Saline	Corning	20-030-CV	
Fetal Bovine Serum			Available from multiple sources
Microcentrifuge tubes, 1.5 mL			Available from multiple sources
Minimum Essential Medium, Alpha modification	Corning	10-022-CV	
Penicillin-Streptomycin	Gibco	15140122	
Perchloric Acid	Sigma Aldrich	50439	
Polypropylene center wells	VWR	72760-048	
Sodium hydroxide	Sigma Aldrich	S5881	
T-25 canted neck tissue culture flask	Corning	430639	
Tissue Culture Incubator			
Trypsin (0.25%)-EDTA	Gibco	25200056	
Ultima Gold (Scintillation solution)	PerkinElmer	6013329	
Whatman Chromatography paper	Sigma Aldrich	WHA3030917	