

Materials List for

Three-Dimensional Cell Culture of Adipose-Derived Stem Cells in a Hydrogel with Photobiomodulation Augmentation

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jove.com/video/66616

Materials

Name	Company	Catalog Number	Comments
525 nm diode laser	National Laser Centre of South Africa	EN 60825-1:2007	
825 nm diode laser	National Laser Centre of South Africa	SN 101080908ADR-1800	
96 Well Strip Plates	Sigma-Aldrich	BR782301	
Amphotericin B	Sigma-Aldrich	A2942	Antibiotic (0.5%; 0.5 mL)
CellTiter-Glo 3D Cell Viability Assay	Promega	G9681	ATP reagent, Proliferation assay Kit
Corning 2 mL External Threaded Polypropylene Cryogenic Vial	Corning	430659	cryovial
CryoSOfree	Sigma-Aldrich	C9249	Cell freezing media
CytoTox96 Non-Radioactive Cytotoxicity Assay	Promega	G1780	Cytotoxicity reagent
Dulbecco's Modified Eagle Media	Sigma-Aldrich	D5796	Basal medium (39 mL/44 mL)
FieldMate Laser Power Meter	Coherent	1098297	
Flat-bottomed Corning 96 well clear polystyrene plate	Sigma-Aldrich	CLS3370	
Foetal bovine serum	Biochrom	S0615	Culture medium enrichment (5 mL; 10% / 10 mL; 20%)
Hanks Balanced Salt Solution (HBSS)	Sigma-Aldrich	H9394	Rinse solution
Heracell 150i CO ₂ incubator	Thermo Scientific	51026280	
Heraeus Labofuge 400	Thermo Scientific	75008371	Plate spinner for 96 well plates
Heraeus Megafuge 16R centrifuge	ThermoFisher	75004270	
Immortalized ADSCs	ATCC	ASC52Telo hTERT, ATCC SCRC-4000	Passage 37
Invitrogen Countess 3	Invitrogen	AMQAX2000	Automated cell counter for Trypan Blue
Julabo TW20 waterbath	Sigma-Aldrich	Z615501	Waterbath used to warm media to 37 °C
Olympus CellSens Entry	Olympus	Version 3.2 (23706)	Imaging software: digital image acquisition

Olympus CKX41	Olympus	SN9B02019	Inverted light microscope
Olympus SC30 camera	Olympus	SN57000530	Camera attached to inverted light microscope
Opaque-walled Corning 96 well solid polystyrene microplates	Sigma-Aldrich	CLS3912	Opaque well used for ATP luminescence
Penicillin-Streptomycin	Sigma-Aldrich	P4333	Antibiotic (0.5%; 0.5 mL)
SigmaPlot 12.0	Systat Software Incorporated		
TrueGel3D – True3	Sigma-Aldrich	TRUE3-1KT	10 µL
TrueGel3D Enzymatic Cell Recovery Solution	Sigma-Aldrich	TRUEENZ	01:20
Trypan Blue Stain	Thermo Fisher - Invitrogen	T10282	0.4% solution
TrypLE Select Enzyme (1x)	Gibco	12563029	Cell detachment solution
Victor Nivo Plate Reader	Perkin Elmer	HH3522019094	Spectrophotometric plate reader