

Materials List for:

A Human 3D Extracellular Matrix-Adipocyte Culture Model for Studying Matrix-Cell Metabolic Crosstalk

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Materials

Name	Company	Catalog Number	Comments
0.25% trypsin-EDTA	Gibco, ThermoFisher Scientific Inc., Waltham, MA, USA	Cat#25200056	
1.5 mL cryovial tube	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#02-682-557	
10% Neutral Buffered Formalin	VWR International LLC., Radnor, PA, USA	Cat#89370-094	
100 µm nylon mesh filter	Corning Inc., Corning, NY, USA	Cat#352360	
2-Deoxy-D-glucose	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#D8375	
2 nM 3,3',5-Triiodo-L-thyronine sodium salt (T3)	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#T6397	
24-well tissue culture plates	VWR International LLC., Radnor, PA, USA	Cat#10861-700	
3-Isobutyl-1-methylxanthine (IBMX)	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#I5879	
96-well tissue culture plates	VWR International LLC., Radnor, PA, USA	Cat#10861-666	
Antibiotic-Antimycotic Solution (ABAM)	Gibco, ThermoFisher Scientific Inc., Waltham, MA, USA	Cat#15240062	
Biotin	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#B4639	
Bovine Serum Albumin (BSA)	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#A8806	
Buffer RLT	Qiagen, Hilden, Germany	Cat#79216	
Ciglitizone	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#C3974	
Deoxy-D-glucose, 2-[1,2-3H (N)]-	PerkinElmer Inc., Waltham, MA, USA	Cat#NET328A250UC	
Deoxyribonuclease I from bovine pancreas, type II-S	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#D4513	
Dexamethasone	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#D4902	
Dimethyl Sulfoxide	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#BP231	Flammable, caustic

Disodium EDTA	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#BP118	
D-pantothenic acid hemicalcium salt	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#21210	
Dulbecco's Modified Eagle Medium: Nutrient Mixture F-12 (DMEM/F12)	Gibco, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#11320033	
Ethanol	Decon Labs, Inc., King of Prussia, PA, USA	Cat#DSP-MD.43	Flammable
EVE Cell Counting Slides, NanoEnTek	VWR International LLC., Radnor, PA, USA	Cat#10027-446	
Fetal bovine serum (FBS)	Gibco, ThermoFisher Scientific Inc., Waltham, MA, USA	Cat#10437028	
Glutaraldehyde	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#G5882	Caustic
Hexamethyldisilazane	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#440191	Flammable, caustic
Human insulin solution	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#I9278	
Isopropanol	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#A415	Flammable
Isoproterenol	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#I5627	Flammable
KCl	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#S25484	
KH ₂ PO ₄	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#P5655	
Lipase from porcine pancreas, type VI-S	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#L0382	
MgSO ₄ *7H ₂ O	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#230391	
Na ₂ HPO ₄	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#S5136	
NaCl	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#S3014	
NaHCO ₃	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#S233	
NH ₄ Cl	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#A661	
Optimal cutting temperature (OCT) compound	Agar Scientific, Ltd., Stansted, Essex, UK	Cat# AGR1180	
Oil Red-O Solution (ORO)	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#O1391	
Oil Red-O Stain Kit	American Master Tech Scientific Inc., Lodi, CA, USA	Cat#KTORO-G	
Osmium tetroxide	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#201030	Caustic
Phenylmethylsulfonyl fluoride (PMSF)	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#93482	Caustic
Phosphate Buffered Saline Solution (PBS)	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#SH3025601	
Ribonuclease A from bovine pancreas, type III-A	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#R5125	
RNAEasy Fibrous Tissue MiniKit	Qiagen, Hilden, Germany	Cat#74704	

Scintillation Fluid	Fisher Scientific, ThermoFisher Scientific Inc., Waltham, MA USA	Cat#SX18	
Scintillation Counter			
Scissors, forceps, sterile			
Sorensen's phosphate buffer	Thomas Scientific, Inc., Swedesboro, NJ	CAS #: 10049-21-5	
T-150 culture flask	VWR International LLC., Radnor, PA, USA	Cat#10062-864	
TaqMan Gene Expression Master Mix	ThermoFisher Scientific Inc., Waltham, MA USA	Cat#4369016	
Temperature-controlled orbital shaker			
Tissue Homogenizer, BeadBug Microtube Homogenizer	Benchmark Scientific	Cat#D1030	
Transferrin	Sigma-Aldrich, Inc. St Louis, MO, USA	Cat#T3309	
Triglyceride Determination Kit	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#TR0100	
Trypan blue stain, 0.4%	VWR International LLC., Radnor, PA, USA	Cat#10027-446	
Type II collagenase	Gibco, ThermoFisher Scientific Inc., Waltham, MA, USA	Cat#17101015	
Whatman Reeve Angel filter paper, Grade 201, 150mm	Sigma-Aldrich, Inc., St Louis, MO, USA	Cat#WHA5201150	