

Materials List for

Isolation and Identification of Vascular Endothelial Cells from Distinct Adipose Depots for Downstream Applications

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jove.com/video/63999

Materials

Name	Company	Catalog Number	Comments
Tissue dissection tools			
5 forceps (2)	Fine Science Tools	11252-00	For isolation of mesenteric adipose depot and arteries transfer
55 forceps (2)	Fine Science Tools	11295-51	For parenchymal adipose removal
Curved Bonn scissors	Fine Science Tools	14061-10	For isolation of mesenteric adipose depot
Graefe forceps	Fine Science Tools	11051-10	For general dissection steps and isolation of subcutaneous adipose depot
Straight Bonn scissor	Fine Science Tools	14060-09	For general dissection steps and isolation of subcutaneous adipose depot
Stereoscope with light source	Laxco	Z230PT40	For parenchymal adipose removal and artery isolation
Digestive enzymes for Artery Digestion			
Collagenase Type I	Worthington-BioChem	LS004194	
Dispase (Neutral Protease)	Worthington-BioChem	LS02110	
Elastase	Worthington-BioChem	LS002292	
Solutions Recipes			
<i>HEPES Buffer, pH 7.4</i>			<i>Final concentration</i>
Calcium chloride dihydrate	J.T.Baker	1332-1	2 mM
Dextrose (D-glucose) anhydrous	Fisher	D16-500	10 mM
HEPES	Fisher	BP310-500	10 mM
Magnesium Chloride	Fisher	M33-500	1 mM
Potassium Chloride	Fisher	P217-500	5 mM
Sodium chloride	Oxoid	LP0005	145 mM

<i>Dissociation Solution, pH 7.30-7.40</i>			
Dextrose (D-glucose) anhydrous	Fisher	D16-500	10 mM
HEPES	Fisher	BP310-500	10 mM
Magnesium Chloride	Fisher	M33-500	2 mM
Potassium Chloride	Fisher	P217-500	56 mM
Sodium chloride	Oxoid	LP0005	55 mM
Sodium L-Glutamate monohydrate	TCI	G0188	80 mM
Flow Cytometry Analyses			
5 mL Polystyrene round-bottom tube with cell-strainer cap	Falcon	352235	
CD31-PE	Miltenyi Biotec	130-119-653	0.75µg/sample
CD36-APC	R&D Systems	AF2519	2.5µg/ sample
CD45-FITC	BioLegend	103108	2.5µg/ sample
Live/Dead Fixable Violet Dead Cell Staining kit (cell viability stain)	Invitrogen	L34955	1µL/sample