

Materials List for:

Isolation, Culture, and Adipogenic Induction of Neural Crest Original Adipose-Derived Stem Cells from Periaortic Adipose Tissue

Yiding Qi¹, Xiang Miao², Lian Xu³, Mengxia Fu³, Shi Peng⁴, Kailei Shi⁵, Jun Li⁴, Maoqing Ye⁵, Ruogu Li¹

¹Department of Cardiology, Shanghai Chest Hospital, Shanghai Jiao Tong University

²Shanghai Institute of Nutrition and Health, Shanghai Institute for Biological Sciences, Chinese Academy of Sciences

³Shanghai Key Laboratory of Hypertension, Shanghai Institute of Hypertension, Ruijin Hospital Affiliated to Shanghai Jiao Tong University School of Medicine

⁴Department of Cardiology, Shanghai General Hospital, Shanghai Jiao Tong University School of Medicine

⁵Department of Cardiology, Shanghai Key Laboratory of Clinical Geriatric Medicine, Huadong Hospital Affiliated to Fudan University

*These authors contributed equally

Correspondence to: Maoqing Ye at yemaoqing@fudan.edu.cn, Ruogu Li at lrg@sjtu.edu.cn

URL: <https://www.jove.com/video/60691>

DOI: [doi:10.3791/60691](https://doi.org/10.3791/60691)

Materials

Name	Company	Catalog Number	Comments
4% PFA	BBI life sciences	E672002-0500	Lot #: EC11FA0001
Agarose	ABCONE (China)	A47902	1% working concentration
Anti-cebp/α	ABclonal	A0904	1:1000 working concentration
Anti-mouse IgG, HRP-linked	CST	7076	1:5000 working concentration
Anti-perilipin	Abcam	AB61682	1 µg/mL working concentration; lot #: GR66486-54
Anti-PPARγ	SANTA CRUZ	sc-7273	0.2 µg/mL working concentration
Anti-rabbit IgG, HRP-linked	CST	7074	1:5000 working concentration
Anti-β-Tubulin	CST	2146	1:1000 working concentration
BSA	VWR life sciences	0332-100G	50 mg/mL working concentration; lot #: 0536C008
Collagenase, Type I	Gibco	17018029	
Dexamethasone	Sigma-Aldrich	D4902	0.1 µM working concentration
Erythrocyte Lysis Buffer	Invitrogen	00-4333	
FBS	Corning	R35-076-CV	50 mg/mL working concentration; lot #: R2040212FBS
HBSS	Gibco	14025092	
HDMEM	Gelifesciences	SH30243.01	Lot #: AD20813268
IBMX	Sigma-Aldrich	I7018	0.5 mM working concentration
Insulin	Sigma-Aldrich	I3536	1 µg/mL working concentration
Microsurgical forceps	Suzhou Mingren Medical Equipment Co.,Ltd. (China)	MR-F201A-1	
Microsurgical scissor	Suzhou Mingren Medical Equipment Co.,Ltd. (China)	MR-H121A	
Oil Red O solution	Sigma-Aldrich	O1516	0.3% working concentration
PBS (Phosphate buffered saline)	ABCONE (China)	P41970	
Penicillin-Streptomycin	Gibco	15140122	
PrimeScript RT reagent Kit	TAKARA	RR047A	Lot #: AK4802
RNeasy kit	TAKARA	9767	Lot #: AHF1991D
Rosa26 ^{RFP/+} mice	JAX	No.007909	C57BL/6 background; male and female
Rosiglitazone	Sigma-Aldrich	R2408	1 µM working concentration

Standard forceps	Suzhou Mingren Medical Equipment Co.,Ltd. (China)	MR-F424	
Surgical scissor	Suzhou Mingren Medical Equipment Co.,Ltd. (China)	MR-S231	
SYBR Premix Ex Taq	TAKARA	RR420A	Lot #: AK9003
Triiodothyronine	Sigma-Aldrich	T2877	10 nM working concentration
Wnt1-Cre ⁺ ;PPAR γ ^{flox/flox} mice	JAX	No.009107	C57BL/6 background; male and female