

Materials List for:

# Ultrasonic-Augmented Primary Adult Fibroblast Isolation

Stephan R. Kuenzel<sup>1</sup>, Charlotte Schaeffer<sup>1</sup>, Karolina Sekeres<sup>1</sup>, Carola S. Mehnert<sup>1</sup>, Stephanie M. Schacht Wall<sup>1</sup>, Manja Newe<sup>1</sup>, Susanne Kämmerer<sup>1</sup>, Ali El-Armouche<sup>1</sup>

<sup>1</sup>Institute of Pharmacology and Toxicology, Faculty of Medicine Carl Gustav Carus, Technische Universität Dresden

Correspondence to: Stephan R. Kuenzel at [Stephan.Kuenzel@tu-dresden.de](mailto:Stephan.Kuenzel@tu-dresden.de), Ali El-Armouche at [ali.el-armouche@tu-dresden.de](mailto:ali.el-armouche@tu-dresden.de)

URL: <https://www.jove.com/video/59858>

DOI: [doi:10.3791/59858](https://doi.org/10.3791/59858)

## Materials

Name	Company	Catalog Number	Comments
0.25% Trypsin-EDTA	Sigma-Aldrich, St. Louis, USA	T4049-100ML	
Antibiotics	Gibco-Life Technologies, Carlsbad, USA	Gibco LS15140148	Penicillin/ Streptomycin (10000 U/ml)
Cell culture hood	Thermo Fisher Scientific, Waltham, USA	51023608	HeraSafe KSP15
Cell culture incubator	Thermo Fisher Scientific, Waltham, USA	50049176	BBD 6220
Cell culture plates	Thermo Fisher Scientific, Waltham, USA	depends on vessel	6-, 12-, 24-wells Nunclon surface
Cell culture suction	VACUUBRAND GMBH + CO KG, Wertheim, Germany	20727400	BVC professional suction
Cell strainer (mesh)	Corning, Tewksbury, USA	431750	40 µm Nylon
Centrifuge	Thermo Fisher Scientific, Waltham, USA	75007213	Megafuge 8R
Cordless pipetting controller	Hirschmann, Eberstadt, Germany	9907200	Pipetus
Disposable pipette tips	Sigma-Aldrich, St. Louis, USA	depends on volume	SafeSeal tips for pipettes (10 µl, 20 µl, 100 µl, 200 µl, 1000 µl)
Disposable plastic pipettes	Sigma-Aldrich, St. Louis, USA	depends on volume	5 ml, 10 ml, 25 ml, 50 ml
Disposable sterile scalpel	Myco Medical, Cary, USA	n.a.	Techno cut
Dulbeccos Modified Eagle Medium (DMEM)	Thermo Fisher Scientific, Waltham, USA	41965-062	High glucose
Eppendorf tubes	Eppendorf, Hamburg, Germany	depends on volume	50 µl, 500 µl, 1.500µl, 2.000 µl
Fetal calf serum (FCS)	Sigma-Aldrich, St. Louis, USA	F2442-50ML	
Collagenase blend	Sigma-Aldrich, St. Louis, USA	5401020001	Liberase TL Research Grade
Petri dish 6 cm	Sigma-Aldrich, St. Louis, USA	P5481-500EA	
Phosphate Buffered Saline (PBS)	Sigma-Aldrich, St. Louis, USA	D8537-500ML	500 ml
Senescence detection kit	Abcam, Cambridge, UK	ab65351	
Shaker/ Vortex	IKA, Staufen im Breisgau, Germany	n.a.	MS2 Minishaker (subsequent model: Ident-Nr.: 0020016017)
Sterile plastic tubes	Thermo Fisher Scientific, Waltham, USA	Falcon 352095	BD Falcon tubes (15 ml, 50 ml)
Ultrasonic water bath	BANDELIN electronic GmbH & Co. KG, Berlin, Germany	312	Sonorex RK100H
Surgical scissors (atraumatic)	Aesculap AG, Tuttlingen, Germany	NR 82	
Surgical scissors	Aesculap AG, Tuttlingen, Germany	eq 1060.09	
Surgical forceps	Aesculap AG, Tuttlingen, Germany	BD577	