

Fabrication of 3D Cardiac Microtissue Arrays using Human iPSC-Derived Cardiomyocytes, Cardiac Fibroblasts, and Endothelial Cells

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Materials

Name	Company	Catalog Number	Comments
12-well plates	Fisher Scientific	08-772-29	
3D micro-molds	Microtissues	12-81 format	
6-well plates	Fisher Scientific	08-772-1B	
AutoMACS Rinsing Solution	Thermo Fisher Scientific	NC9104697	
B27 Supplement minus Insulin	Life Technologies	A1895601	
B27 Supplement plus Insulin	Life Technologies	17504-044	
BD Cytotfix	BD Biosciences	554655	
BD Matrigel, hESC-qualified matrix	BD Biosciences	354277	
Cardiac Troponin T Antibody	Miltenyi	130-120-403	
CD144 (VE-Cadherin) MicroBeads	Miltenyi	130-097-857	
CD31 Antibody	Miltenyi	130-110-670	
CD31 Microbeads	Miltenyi	130-091-935	
CHIR-99021	Selleckchem	S2924	
DDR2	Santa Cruz Biotechnology	sc-81707	
Dead Cell Apoptosis Kit with Annexin V FITC and PI	Thermo Fisher Scientific	V13242	
Dispase I	Millipore Sigma	4942086001	
DMEM, high glucose (4.5g/L) no glutamine medium		11960044	
DMEM/F-12 basal medium	Gibco	11320033	
Dulbecco's phosphate buffered saline (DPBS), no calcium, no magnesium	Life Technologies	14190-136	
EGM2 BulletKit	Lonza	CC-3124	
Fetal bovine serum	Life Technologies	10437	
FibroLife Serum-Free Fibroblast LifeFactors Kit	LifeLine Cell Technology	LS-1010	

Glucose free RPMI medium	Life Technologies	11879-020	
Goat serum	Life Technologies	16210-064	
Human FGF-basic	Thermo Fisher Scientific	13256029	
Human VEGF-165	PeptoTech	100-20	
IWR-1-endo	Selleckchem	S7086	
Liberase TL	Millipore Sigma	5401020001	
LS Sorting Columns	Miltenyi	130-042-401	
MACS BSA Stock solution	Miltenyi	130-091-376	
MACS Rinsing Buffer	Miltenyi	130-091-222	
MidiMACS Separator	Miltenyi	130-042-302	
RPMI medium	Life Technologies	11835055	
SB431542	Selleckchem	S1067	
TO-PRO 3	Thermo Fisher Scientific	R37170	
Triton X-100	Millipore Sigma	X100-100ML	
TrypLE Select 10X	Thermo Fisher Scientific	red	
Vimentin Alexa Fluor® 488-conjugated Antibody	R&D Systems	IC2105G	