

Materials List for:

Encapsulation of Cardiomyocytes in a Fibrin Hydrogel for Cardiac Tissue Engineering

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Materials

Name	Company	Catalog Number	Comments
Sodium chloride	Sigma-Aldrich	S7653	PBS
Potassium chloride	Sigma-Aldrich	P9333	PBS
Sodium phosphate dibasic	Sigma-Aldrich	S7907	PBS
Potassium phosphate monobasic	Sigma-Aldrich	P5655	PBS
Glucose	Sigma-Aldrich	G5400	Isolation
hemostat	Fine Science Tools	91308-12	Isolation
fine tweezers	Fine Science Tools	11251-20	Isolation
large scissors	Fine Science Tools	91401-14	Isolation
micro-scissors	Fine Science Tools	91501-09	Isolation
scalpel handle	Fine Science Tools	10008-13	Isolation
scalpel blade	Fisher Scientific	08-918-5A	Isolation
Absorbent bench underpad	VWR international	56617-014	Isolation
sterile drape	Fisher Scientific	GM42526	Isolation
autoclave bag	Fisher Scientific	01-812-54	Isolation
gauze pad	Fisher Scientific	13-761-52	Isolation
betadine	Purdue Products L.P.	67618-150-01	Isolation
sterile gloves	Fisher Scientific	19-020	Isolation
sterile transfer pipette	Fisher Scientific	9962	Isolation
collagenase	Worthington Biochemical	CLS2	Isolation
Teflon rod 1/4 inch diameter	McMaster-Carr	8546K11	Mold part
Teflon tube 1/4 inch ID, 1/2 inch OD	McMaster-Carr	8547K31	Mold part
Silicone O-Ring 1/4 inch ID, 1/2 inch OD	McMaster-Carr	9396K204	Mold part
Teflon tube 1/4 inch ID, 5/16 inch OD	McMaster-Carr	52355K14	Mold part
Kendall monoject syringes 6cc	Fisher Scientific	05-561-41	Mold part
BD syringe 3cc	Fisher Scientific	309585	Mold part
Bovine Fibrinogen	Sigma-Aldrich	F8630	Construct
Bovine Thrombin	Sigma-Aldrich	T7513	Construct
1 M HEPES	Sigma-Aldrich	H0887	Construct
Sodium Chloride	Sigma-Aldrich	S7653	Construct
DMEM	Invitrogen	10569	Construct
Pluronic F-127	Sigma-Aldrich	P2443	Construct
Calcium Chloride	Sigma-Aldrich	383147	Construct

0.2 micron filter	Fisher Scientific	SCGVT05RE	Construct
40 micron cell strainers	Fisher Scientific	22-363-547	Construct
0.45 micron bottle top filter	Corning	430627	Construct
glass pre-filter	EMD Millipore	AP2007500	Construct
18G 1 1/2 inch long needle	Fisher Scientific	14-826-5D	Construct
21G 1 inch needle	Fisher Scientific	14-826C	Construct
construct jars	Fisher Scientific	2116	Construct
Penicillin-streptomycin	Invitrogen	15140	Media
horse serum	Sigma-Aldrich	H1138	Media
Fetal bovine serum	Invitrogen	16000	Media
aminocaproic acid	Acros Organics	103305000	Media
ascorbic acid	Sigma-Aldrich	A5960	Media
insulin	Sigma-Aldrich	I9278	Media
Paraformaldehyde, 16%	Electron Microscopy Sciences	15710	Histology
Optimal cutting temperature (OCT)	Ted Pella, Inc.	27050	Histology
2-methylbutane	Fisher Scientific	03551-4	Histology
Mouse MYH1/2/4/6 primary antibody	Santa Cruz Biotechnology, Inc.	SC-32732	Histology
Rabbit Connexin 43 primary antibody	Cell Signaling Technology	3512	Histology
Dylight 549-conjugated donkey anti-mouse secondary antibody	Jackson ImmunoResearch	715-505-151	Histology
Dylight 488-conjugated Donke anti-rabbit secondary antibody	Jackson ImmunoResearch	711-485-152	Histology
Live/dead assay	Invitrogen	L-3224	Analysis