

Materials List for:

Surface Engineering of Pancreatic Islets with a Heparinized StarPEG Nanocoating

Jingyi Yang¹, Shaofeng Lou¹, Deling Kong¹, Chen Li¹

¹Tianjin Key Laboratory of Biomaterial Research, Institute of Biomedical Engineering, Chinese Academy of Medical Science & Peking Union Medical College

Correspondence to: Chen Li at cli0616826@126.com

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Materials

Name	Company	Catalog Number	Comments
Reagent			
PBS	Hyclone	AAJ207798	
Streptozototin	Sigma	S0130	
Histopaque	Sigma	10831	
RPMI 1640	GIBCO, by Life Technologies	31800022	
Fetal Bovine Serum	GIBCO, by Life Technologies	16000-044	
Penicillin Streptomycin	GIBCO, by Life Technologies	15140	
Cell Dissociation Solution	GIBCO, by Life Technologies	13150-016	
DMEM	GIBCO, by Life Technologies	12800017	
D-(+)-Glucose solution	Sigma	G8644	
488 phalloidin	Sigma	A12379	
CFSE	Sigma	21888-25mg-F	
Annexin V/PI apoptosis kit	Dojindo	AD10	
DAPI Fluoromount-G	SouthernBiotech	0100-20	
Collagenase from Clostridium, Type XI	Sigma	C7657	
Heparin	Sigma-Aldrich	H3149	
NHS	Sigma-Aldrich	56480	
EDC	Sigma-Aldrich	3449	
8-armed PEG	J&K Scientific Ltd	1685176	
FAM	Sigma-Aldrich	M041100	
5(6)-carboxyfluorescein N-succinimidyl ester	Sigma-Aldrich	21888	
KBr	J&K Scientific Ltd	32036	
3-aminopropyl-triethoxysilane	Sigma-Aldrich	A3648	
toluene	J&K Scientific Ltd	S-15497-20X	
Live/dead staining kit	Biovision, US	K501	
BD Matrigel™, basement membrane matrix, growth factor reduced	BD Bioscience	354230	
Sodium chloride, 99.5%	J&K Scientific Ltd	105864	
Potassium chloride, 99%, extra pure	J&K Scientific Ltd	991468	
Sodium bicarbonate, 99.7%, ACS reagent	J&K Scientific Ltd	988639	

Magnesium chloride hexahydrate, 99%, ACS reagent	J&K Scientific Ltd	182158	
Potassium dihydrogen phosphate, 99%, extra pure	J&K Scientific Ltd	128839	
Magnesium sulfate heptahydrate, 99%, for analysis	J&K Scientific Ltd	119370	
Calcium chloride solution volumetric, 1.0 M CaCl ₂	J&K Scientific Ltd	21114	
Bovine Serum Albumin	Sigma-Aldrich	V900933	
Rat/Mouse Insulin ELISA kit	Millipore-linco	EZRMI-13K	