

Materials List for:

Sustained Administration of β -cell Mitogens to Intact Mouse Islets *Ex Vivo* Using Biodegradable Poly(lactic-co-glycolic acid) Microspheres

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Materials

Name	Company	Catalog Number	Comments
Oregon Green 488 Carboxylic Acid, Succinimidyl Ester, 6-isomer	ThermoFisher Scientific	O6149	For labeling COI with fluorophore
DMSO Dimethyl Sulfoxide	Fisher BioReagents	BP231-1	For dissolving fluorophore in step 1
Disposable PD-10 Desalting Columns	GE Healthcare	17-0851-01	Desalting column used in step 1
Resomer RG 505, Poly(D,L-lactide-co-glycolide), ester terminated, molecular weight 54,000 - 69,000	Sigma-Aldrich	739960	Used in generation of microspheres in step 2
Poly(vinyl alcohol) molecular weight 89,000 - 98,000	Sigma-Aldrich	341584	Used in generation of microspheres in step 2
RPMI 1640	Thermo Scientific	11879-020	For culturing islets
Dextrose Anhydrous	Fisher BioReagents	200-075-1	Supplement for islet media
Penicillin-Streptomycin	Sigma-Aldrich	P4333	Antibiotics for islet media
Normal horse serum	Jackson ImmunoResearch	008-000-121	Supplement for islet media
96-well tissue culture plate	Corning	3603	For culturing islets
Ethylene glyco-bis(2-aminoethylether)-N,N,N',N'-tetraacetic acid	Sigma-Aldrich	E4378	Supplement for pre-assay islet media
Cytospin 4 Cytocentrifuge	Thermo Scientific	A78300003	For spinning cells onto microscope slides
EZ Single Cytotunnel	Thermo Scientific	A78710020	For spinning cells onto microscope slides
Ethylenediaminetetraacetic acid	Fisher BioReagents	BP118-500	Used in dissociating islets
paraformaldehyde	Sigma-Aldrich	P6148	For fixing cells
Triton X-100	Fisher BioReagents	BP151	For permeabilizing cells
Normal donkey serum	Jackson ImmunoResearch	017-000-121	Blocking reagents for immunofluorescence
Anti-Ki67 antibody	abcam	ab15580	For Ki67 immunofluorescence
Polyclonal Guinea Pig Anti-Insulin	Dako	A0564	For insulin immunofluorescence
Cy3 AffiniPure Donkey Anti-Rabbit	Jackson ImmunoResearch	711-165-152	For Ki67 immunofluorescence
Cy5 AffiniPure Donkey Anti-Guinea Pig	Jackson ImmunoResearch	706-175-148	For insulin immunofluorescence
DAPI (4',6-Diamidino-2-Phenylindole, Dihydrochloride)	ThermoFisher Scientific	D1306	For nuclei visualization in immunofluorescence
Aqua-Mount	Lerner Laboratories	13800	Fast drying mounting media

FreeZone -105 °C 4.5 Liter Cascade Benchtop Freeze Dry System	Labconco	7382020	For lyophilization of microspheres
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