

Materials List for:

A High-content *In Vitro* Pancreatic Islet β -cell Replication Discovery Platform

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URL: <https://www.jove.com/video/54298>

DOI: [doi:10.3791/54298](https://doi.org/10.3791/54298)

Materials

Name	Company	Catalog Number	Comments
250 g male Male Sprague Dawley Rat	Charles River	Stain # 400	
12 cm teeth tissue forceps	Fine Science Tools	11021-12	
11.5 cm fine scissors	Fine Science Tools	14058-11	
14.5 cm surgical scissors	Fine Science Tools	14001-14	
16 cm curved forceps	Fine Science Tools	11003-16	
12 cm curved hepostat	Fine Science Tools	13011-12	
12 cm scalpel handle	Fine Science Tools	10003-12	
Tissue sieve-30 mesh	Bellco Glass	1985-85000	
Cizyme RI, 375,000 CDA units	VitaCyte	005-1030	
Hanks' Balanced Salt solution (Ca ⁺ and Mg ⁺⁺)	Gibco	24020-117	
Ketamine HCl (200 mg/20 ml)	JHP Pharmaceuticals	NDC# 42023-113-10	to make anesthetic cocktail
Xylazine (5 g/50 ml)	LLOYD	NADA# 139-236	to make anesthetic cocktail
Histopaque 1077	Sigma	H-1077	to make histopaque 1100
Histopaque 1119	Sigma	H-1119	to make histopaque 1100
Newborn Calf Serum 500 ml	Hyclone	SH30118.03	
Hanks' Balanced Salt solution	Hyclone	SH30268.01	
Dulbecco's Modified Eagle Medium/Low Glucose	Hyclone	SH30021.01	
Functionality/Viability Solution	Mediatech	99-768-CV	
RPMI1640 media	Hyclone	SH30096.01	to make conditioned medium
804G rat bladder carcinoma cell-line	Available upon request		to make conditioned medium
Fetal Bovine Serum, Qualified	Gibco	26160	
GlutaMax-I	Gibco	35050-061	
Penicillin (5,000 IU/ml/Strptomycin (5 mg/ml)	MP Biomedicals	1670049	
Formamide 500 ml	Fisher BioReagents	BP227-500	
Antigen Unmasking Solution 250 ml (pH 6.0)	Vector Laboratories	H-3300	to make 0.15 M Sodium Sitrata solution
Dextrose, Anhydrous	EMD Chemicals	DX0145-1	to make 1 M glucose solution
Nomal Donkey Serum (Powder)	Jackson ImmunoResearch	017-000-121	
Triton X-100	Sigma	T8787-100ML	
Mouse anti-human Ki67 antibody	BD Biosciences	556003	
Goat anti-human PDX-1 antibody	R&D Systems	AF2419	

Polyclonal Guinea Pig anti-insulin antibody	Dako	2016-08	
Polyclonal Rabbit anti-glucagon antibody	Dako	2014-06	
Polyclonal Rabbit anti-somatostatin antibody	Dako	2011-08	
Polyclonal chicken anti-vimentin antibody	abcam	ab24525	
Biotin-SP-conjugated, Donkey Anti-Mouse IgG	Jackson ImmunoResearch	715-065-150	
StreptAvidin, Alex Flour 488 conjugated	Invitrogen	S32354	
Rhodamine-conjugated Donkey Anti-Goat IgG	Jackson ImmunoResearch	705-025-147	
Rhodamine-conjugated Donkey Anti-Guinea Pig IgG	Jackson ImmunoResearch	706-025-148	
Rhodamine-conjugated Donkey Anti-Rabbit IgG	Jackson ImmunoResearch	711-025-152	
Cy 5-conjugated Donkey Anti-Guinea Pig IgG	Jackson ImmunoResearch	706-175-148	
Cy 5-conjugated Donkey Anti-Goat IgG	Jackson ImmunoResearch	705-175-147	
Cy 5-conjugated Donkey Anti-Rabbit IgG	Jackson ImmunoResearch	711-175-152	
Cy 5-conjugated Donkey Anti-Chicken IgG	Jackson ImmunoResearch	703-175-155	
DAPI	Millipore	S7113	
Disposable Reagent Reservoir 25 ml	Sorenson BioScience	39900	
384 well, black/clear, tissue culture treated plate	BD Falcon	353962	
96 well, black/clear, tissue culture treated plate	Costar	3603	
Multi-channel pipettor	Costar	4880	
12-channel vacuume aspirator	Drummond	3-000-096	
Cell Scraper	Falcon	353085	
Isotemp Water Bath Model 2223	Fisher Scientific		
High-content screening instrument: ArrayScan VT1	Thermo Scientific		