

Materials List for

# Bioluminescent Monitoring of Graft Survival in an Adoptive Transfer Model of Autoimmune Diabetes in Mice

Taylor Stewart<sup>1</sup>, Kevin Bode<sup>2</sup>, Stephan Kissler<sup>2</sup>, Peng Yi<sup>1</sup>

<sup>1</sup>Section for Islet Cell and Regenerative Biology, Joslin Diabetes Center, Harvard Medical School <sup>2</sup>Section for Immunology, Joslin Diabetes Center, Harvard Medical School

## Corresponding Authors

**Stephan Kissler**

stephan.kissler@joslin.harvard.edu

**Peng Yi**

peng.yi@joslin.harvard.edu

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jove.com/video/64836

## Materials

Name	Company	Catalog Number	Comments
0.05% Trypsin, 0.53 mM EDTA	Corning	25-052-CI	
293FT	Invitrogen	R70007	Fast-growing, highly transfectable clonal isolate derived from human embryonal kidney cells transformed with the SV40 large T antigen
ACK Lysing Buffer	Gibco	A10492-01	
Alcohol prep pads, 70% Isopropyl alcohol	Amazon/Ever Ready First Aid	B08NWF31DX	
BD 5ml Syringe Luer-Lok Tip	BD	309646	
BD PrecisionGlide Needle 26G x 5/8 (0.45 mm x 16 mm) Sub-Q	BD	305115	
BD 1 mL TB Syringe Slip Tip	BD	309659	
Blasticidin S HCl	Corning	30-100-RB	
Cell strainer premium SureStrain, 70 µm, sterile	Southern Labware	C4070	Or use similar sterile strainer with 40-70µm pore size
CellDrop automated cell counter	Denovix	CellDrop BF-PAYG	Or use similar cell counter device
Corning 100 mL Penicillin-Streptomycin Solution, 100x	Corning	30-002-CI	
Disposable Aspirating Pipets, Polystyrene, Sterile, Capacity=2 mL	VWR	414004-265	Or use similar aspirating pipette
D-Luciferin, Potassium Salt, Molecular Biology Grade, Powder, >99%	Goldbio	LUCK-100	
DMEM, high glucose, pyruvate, no glutamine	Gibco	10313039	
Falcon BD tubes, 50 mL	Fisher Scientific	14-959-49A	
Fetal Bovine Serum	Gibco	10437-028	
Forceps premium for tissues, 1 x 2 teeth 5 in, German Steel	Fisher Scientific	13-820-074	
Glucose urine test strip	California Pet Pharmacy	u-tsg100	Or use similar test strip for glucose measurements in urine/blood

GlutaMAX-1 (100x)	Gibco	35050-061	
Infrared heating lamp	Cole Parmer	03057-00	Or use similar infrared lamp
Insulin syringe 0.5 mL, U-100 29 G 0.5 in	Becton Dickinson	309306	
Isoflurane, USP	Piramal Critical Care	6679401725	
IVIS Spectrum in vivo imaging system	Perkin Elmer	124262	Instrument for non-invasively collecting bioluminescent images of transplanted cells
Living Image Analysis Software	Perkin Elmer	128113	Software for collecting and quantifying bioluminescent signal
Microcentrifuge tubes seal-rite, 1.5 mL	USA Scientific	1615-5510	Or use similar sterile microcentrifuge tubes
NIT-1	ATCC	CRL-2055	Pancreatic beta-cell line derived from NOD/Lt mice
NOD.Cg-Prkdcscid/J	The Jackson Laboratory	001303	Mice homozygous for the severe combined immune deficiency spontaneous mutation Prkdcscid, commonly referred to as scid, are characterized by an absence of functional T cells and B cells, lymphopenia, hypogammaglobulinemia, and a normal hematopoietic microenvironment.
NOD/ShiLtJ	The Jackson Laboratory	001976	The NOD/ShiLtJ strain of mice (commonly called NOD) is a polygenic model for autoimmune type 1 diabetes
PBS, pH 7.4	Thermo Fisher Scientific	10010031	No calcium, no magnesium, no phenol red
pCMV-VSV-G	Addgene	8454	
pLenti-luciferase-blast	Made in-house	Plasmid available upon request	See Supplemental File 1
pMD2.G	Addgene	12259	
pMDLg/pRRE	Addgene	12251	
Polyethylenimine, Linear, MW 25,000, Transfection Grade (PEI 25K)	Fisher Scientific	NC1014320	
pRSV-Rev	Addgene	12253	
Restrainer for rodents, broome-style round 1 in	Fisher Scientific	01-288-32A	
Scissors, sharp-pointed	Fisher Scientific	08-940	Or use other scissors made of surgical-grade stainless steel
Tissue-culture treated culture dishes	Millipore Sigma	CLS430167-20EA	Or use other sterile cell culture-treated Petri dishes
Tweezers/Forceps, fine precision medium tipped	Fisher Scientific	12-000-157	