

Supplemental Tables

Supplemental Table 1. Islet donor information

Donor #	Sex	Age (years)	BMI (Kg/m ²)	HbA1c % (mmol/mol)	Average blood glucose (mg/dl)
1	Male	39	27.6	5.5 (37)	125.4
2	Female	28	24.7	5 (31)	165.4
3	Male	66	29.9	5.8 (40)	163.8
4	Female	62	23	5 (31)	114.4
5	Male	53	31.1	5.9 (41)	165.4
6	Male	29	23.1	5.3 (34)	158.8
7	Male	49	32.5	5.5 (37)	138.6
8	Male	44	25.8	6 (42)	133.2
9	Male	52	25.4	4.2 (22)	246.2
10	Male	61	22.4	5.2 (33)	187.4
11	Male	48	19	5.3 (34)	123.8
12	Female	21	30	5.4 (36)	101.2
13	Male	36	29.6	5.4 (36)	172
14	Male	39	32.4	4.2 (22)	180.4
15	Male	52	37.5	5.3 (34)	181

Supplemental Table 2. Pancreas donor information

Developmental stage	Age	Sex
Fetal	19 gestational weeks	Male
	19 gestational weeks	Unknown
	22 gestational weeks	Unknown
	17 gestational weeks	Female
Adult	46 years old	Male
	42 years old	Male
	24 years old	Female
	35 years old	Male

Supplemental Table 3. List of primary and secondary antibodies

Primary Antibody	Company	Cat#	Use (dilution)
Anti-Insulin	Abcam	Ab181547	Western Blot (1:500)
Anti-GLUT1	Invitrogen	PA5-16793	Western Blot (1:1000)
Anti-GLUT2	R&D	MAB1414	Western Blot (1:1000)
Anti-GAPDH	Cell Signaling	5174S	Western Blot (1:5000)
Anti-mouse IgG HRP	Cell Signaling	7076S	Western Blot (1:5000)
Anti-rabbit IgG HRP	Cell Signaling	7074S	Western Blot (1:5000)

Anti-GLUT1	Abcam	Ab652	Immunostaining islets and SC-islets (1:200) Immunostaining adults and fetal pancreas (1:100)
Anti-GLUT2	R&D	MAB1414	Immunostaining islets and SC-islets (1:200) Immunostaining adults and fetal pancreas (1:100)
Anti-Insulin	DakoCytomation	A0564	Immunostaining (1:500)
Anti-MAFB	Sigma	HPA005653	Immunostaining (1:50)
Anti-NKX2.2	Proteintech	13013-1-AP	Immunostaining (1:20)
Anti-NTPDase3	Ectonucleotidases antibodies	hN3-B3s	Immunostaining (1:50)
Anti-Insulin	Sigma-Aldrich	I2018	Immunostaining (1:5000)
Anti-Glucagon	Abcam	Ab 92517	Immunostaining (1:1000)
Anti-CPEP	DSHB	GN-ID4-c	Flow Cytometry (1:500)
Anti-NKX6.1	DSHB	F55A 12-c	Flow Cytometry (1:500)
Anti-Glucagon	Sigma	G2654	Flow Cytometry (1:500)
Anti-Somatostatin	DakoCytomation	A0566	Flow Cytometry (1:500)
Secondary Antibody	Company	Cat#	Use (dilution)
Anti-rabbit IgG, HRP-linked Antibody	Cell Signaling	7074S	Western Blot (1:5000)
Anti-mouse IgG, HRP-linked Antibody	Cell Signaling	7076S	Western Blot (1:5000)
Goat anti-Guinea Pig IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488	Invitrogen	A11073	Immunostaining (1:500)
Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647	Invitrogen	A31571	Immunostaining (1:500)
Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 568	Invitrogen	A11011	Immunostaining (1:500) Flow Cytometry (1:500)

Donkey Anti-Rat IgG(H+L), Mouse SP ads-AF647	SouthernBiotech	6430-31	Flow Cytometry (1:500)
Goat anti-Mouse IgG1 Cross- Adsorbed Secondary Antibody, Alexa Fluor™ 488	Invitrogen	A21121	Flow Cytometry (1:500)

Supplemental Table 4. List of primers

Name	Sequence	Purpose
SLC2A2_F	GGACCTGCTCCCATTTTCTT	PCR
SLC2A2_R	TCCCCCAAATCCTCTGTATG	PCR
SLC2A2_crispr_Seq_F	GCTCCCATTTTCTTTCCTAGTGG	Sequencing
SLC2A2_crispr_Seq_R	TGCCTGTTTATTTCGCAGCTC	Sequencing