

Supplemental Material

Table S1. Antibodies used for immunohistochemistry (IHC) and immunofluorescence (IF). *Concentration used for triple staining with insulin, somatostatin and glucagon. †Concentration used for double staining with amylase and glucagon.

Antibody	Catalog #	Company	Concentration			Antigen Retrieval	Incubation Time
			IHC FFPE	IHC frozen	IF		
Insulin	565689	BD Biosciences	-	-	1:100	-	1 h
Somatostatin	566032	BD Biosciences	-	-	1:100	-	1 h
Glucagon	565891	BD Biosciences	-	-	1:100*/1:50†	-	1 h
Sytox Orange	S11368	Life Technologies	-	-	500 nM	-	10 min
Synaptophysin	DAK-SYNAP	Dako	1:100	1:140	-	pH 9	30 min
CD45	Clone 2B11 + PD7/26	Dako	-	1:75	-	-	30 min
Amylase	AB21156	Abcam	1:100	-	1:50	pH 6	30 min/1 h
Amylase	HPA045394-100UL	Sigma	1:600	-	-	pH 6	30 min
Amylase	LS-B12950-50	LSBio	1:300	-	-	pH 6	30 min
Trypsin	LS-B13760-200	LSBio	1:100	-	-	pH 6	30 min
Lipase	HPA062494-100UL	Sigma	1:800	-	-	pH 6	30 min
AF488	10729174	Fisher Scientific	-	-	1:500	-	1 h

Table S2. Clinical characteristics of the donors that passed the screening. All islets in donors with type 1 diabetes were insulin negative. “INS pos cells in exocrine tissue” refer to scattered insulin-positive cells surrounded by exocrine tissue as detected by immunofluorescent staining. +: present, -: not present. NDs: Non-diabetic subjects, T1Ds: Type 1 diabetic subjects, Na: Not available. * Biopsies used for LCM. †Biopsies used for IF stainings of amylase.

	Donor No.	Age	Sex	BMI (kg/m ²)	HbA1c, % (mmol/mol)	Pancreas region frozen biopsies	Pancreas region FFPE biopsies	IA2A	GADA	INS pos cells in exocrine tissue	Nr of nuclei		Cause of death
											Exo 1	Exo 3	
NDs	ND-1	13	M	16	5.8, 40	tail*, body†	tail	na	na	+	864	774	Cerebral anoxia due to cardiac arrest
	ND-2	35	F	24.7	na	body*, head†	tail	-	-	+	1314	1014	Hypoxemia due to cardiac arrest
	ND-3	57	F	22.7	6.3, 45	tail*, body†	body	na	na	+	1280	700	Subarachnoid hemorrhage
	ND-4	45	F	25.4	5.7, 38.8	tail*, tail†	head	-	-	+	722	928	Infarction in the cerebellum
	ND-5	21	M	28	5.7, 38.8	tail*, tail†	head	-	-	+	910	946	Head trauma
	ND-6	17	F	28.9	na	body*, body†	tail	na	na	+	1051	686	Traumatic subarachnoid hemorrhage
	ND-7	63	M	24	5.8, 39.9	tail*, head†	head	-	-	+	896	825	Subarachnoid hemorrhage
	ND-8	13	M	19.7	5.2, 33	tail*, tail†	head	-	-	+	883	828	Strangulation
Mean±SD		33±18.8		23.7±4							990±196	838±110	
T1Ds	T1D-1	16	M	21.9	na	tail*, body†	head	na	na	+	762	883	Traumatic subarachnoid hemorrhage
	T1D-2	36	F	20.9	7.2, 55.2	tail*, tail†	body	na	na	+	461	624	Intracranial hemorrhage
	T1D-3	60	F	23.9	8.2, 66.1	tail*, tail†	head	+	+	-	653	874	Subarachnoid hemorrhage
	T1D-4	47	F	27.6	7.4, 57.4	body*, body†	head	-	-	+	415	509	Cardiac arrest
	T1D-5	24	M	27.5	8.3, 67.2	tail*, tail†	head	+	-	-	501	681	Trauma
	T1D-6	25	F	26.7	7.1, 54.1	tail*, body†	tail	-	-	-	925	675	Cerebral edema due to hypoglycemia
	T1D-7	65	M	24.2	na	tail*, tail†	body	na	na	-	1243	985	Trauma by fall
Mean±SD		39±17.5		24.7±2.5							709±275	747±157	

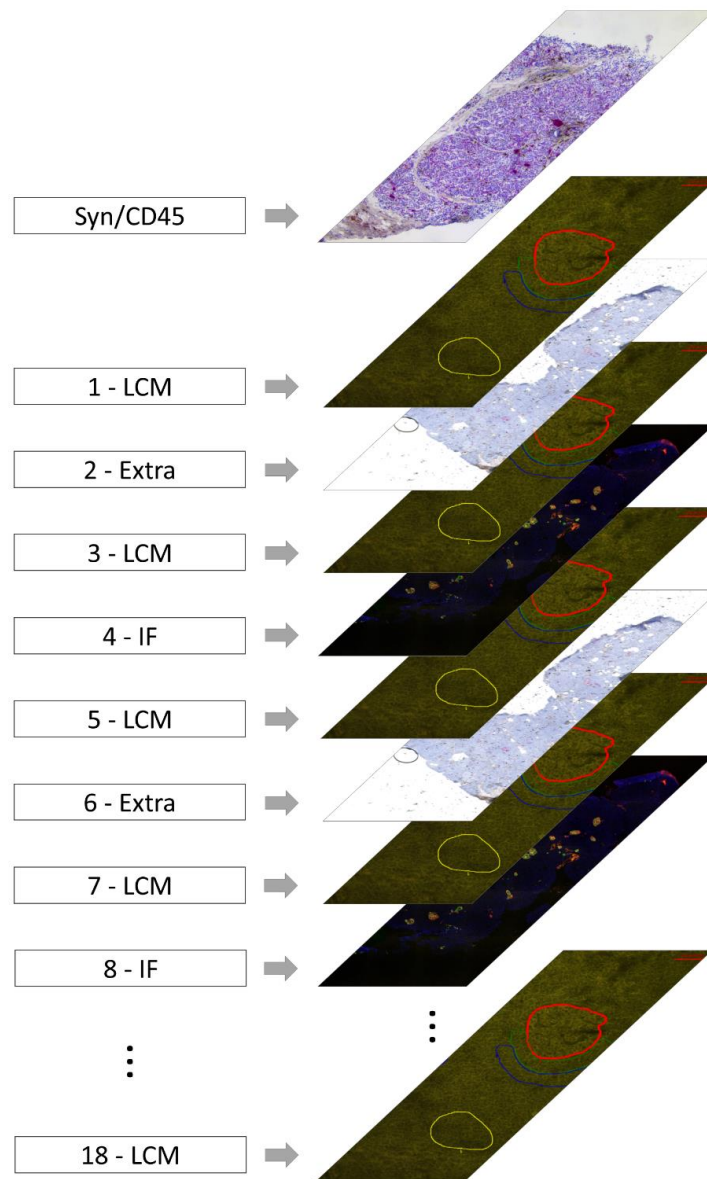


Figure S1. Strategy for consecutive sectioning prior to LCM. Frozen consecutive sections (10 μ m) were mounted on either Arcturus PEN membrane glass slides for LCM or glass slides. The sections on glass slides were used for IF staining of insulin, glucagon and somatostatin, or saved for future analysis. Syn/CD45: synaptophysin/CD45, LCM: Laser Capture Microdissection, IF: Immunofluorescence.

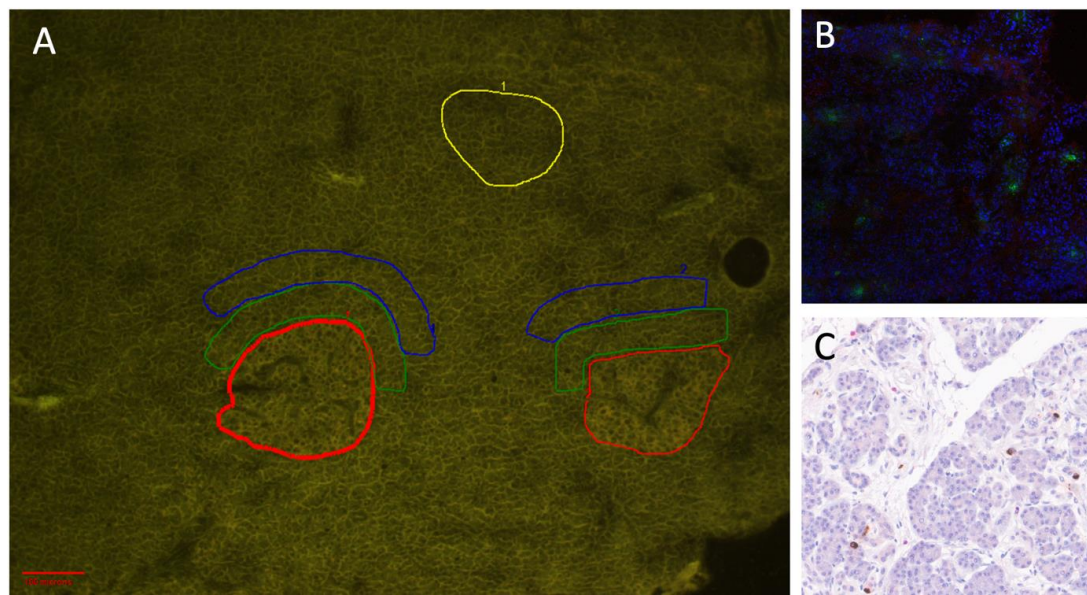


Figure S2. Auto-fluorescence of islets and marked regions before microdissection (A). All islets were insulin-negative but scattered insulin-positive cells were found within the pancreatic tissue as detected by immunofluorescence (B) and by immunohistochemistry (C). Immunohistochemistry sections were stained for insulin (guinea pig polyclonal anti-insulin, dilution 1:200, Agilent, cat: A0564) and counterstained with heamatoxylin using a standard protocol.

Red region: islets, green region: Exo1 (0-50 μm from islets), blue region: Exo2 (50-100 μm from islets) and yellow region: Exo3 (a minimum of 100 μm from islets).