

Supplemental Table 1. Antibodies for flow cytometry

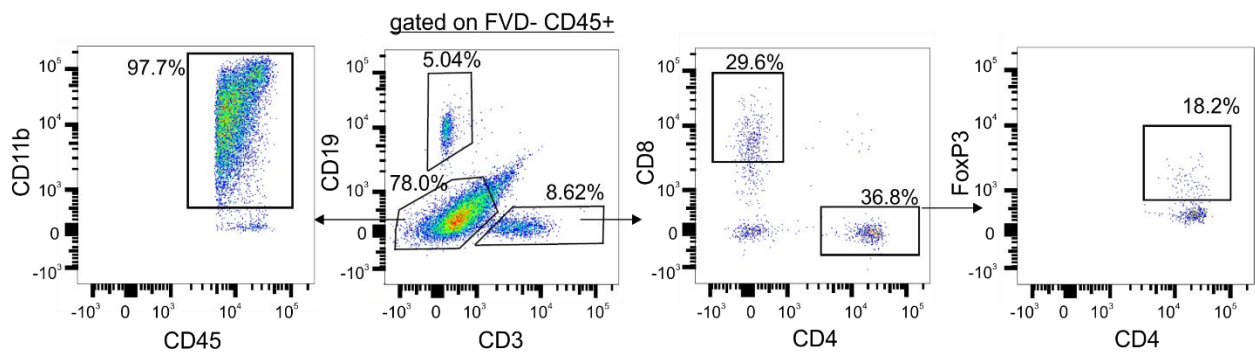
| Target | Clone | Catalogue | Dilution |
|---------------------|--------------|------------------|-----------------|
| Mouse islets | | | |
| CD45 | 30-F11 | 48-0451-82 | 1:100 |
| CD19 | eBio1D3 | 17-0193-82 | 1:100 |
| CD5 | 53-7.3 | 11-0051-82 | 1:150 |
| CD11b | M1/70 | 12-0112-82 | 1:100 |
| CD3 | 17A2 | 564009 | 1:100 |
| CD4 | GK1.5 | 100453 | 1:100 |
| CD3e | 145-2C11 | 25-0031-82 | 1:25 |
| CD8a | 53-6.7 | 100761 | 1:100 |
| FoxP3 | FJK-16s | 11-5773-82 | 1:25 |
| TCR b | H57-597 | 109212 | 1:100 |
| TCR gd | GL3 | 118108 | 1:100 |
| NK1.1 | PK136 | 108714 | 1:100 |
| Human islets | | | |
| CD45 | HI30 | 48-0459-42 | 1:15 |
| CD3 | UCHT1 | 17-0038-42 | 1:20 |

Supplemental Table 2. Human islet donor characteristics.

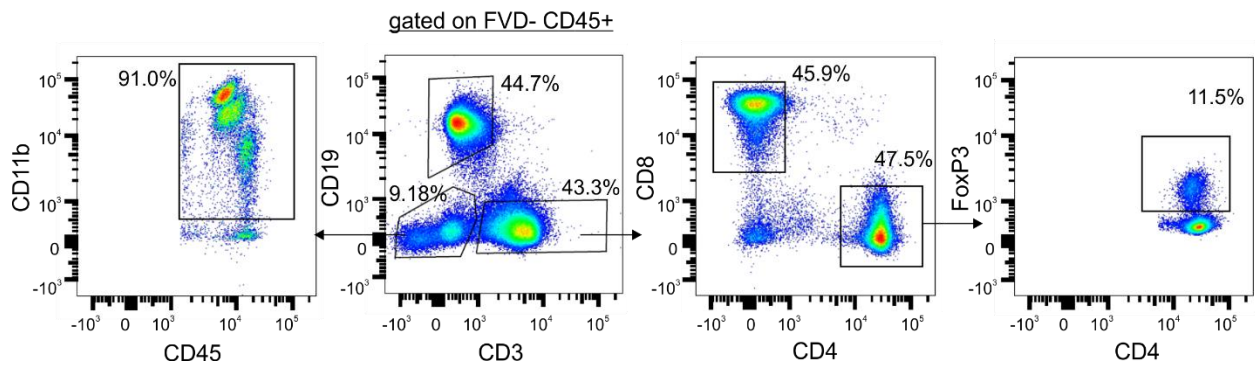
| Islet preparation | 1 | 2 | 3 |
|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Donor demographics | | | |
| Unique identifier | R310 | R314 | R317 |
| Age (years) | 25 | 31 | 54 |
| Sex (M/F) | M | F | M |
| BMI (kg/m²) | 26.4 | 30.3 | 26.4 |
| HbA_{1c} | 5.4 | 5.0 | 5.1 |
| Cause of death | NDD-neurological | NDD-neurological | NDD-neurological |
| Diabetes? (Y/N) | N | N | N |
| Pancreas | | | |
| Origin/source | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core |
| Cold ischaemia time (h) | 11.25 | 14.75 | 21 |
| Islet handling and use | | | |
| Origin/source | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core |
| Isolation centre | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core | Alberta Diabetes Institute Islet Core |
| Estimated purity (%) | 90 | 80 | 90 |
| Total culture time (h) | ~96 | ~48 | ~96 |
| Functional measurement (Stimulation index mean 10 mM to 1 mM) | 14.07 | 3.62 | 11.9 |
| Experimental islet use (including in which experiment each islet preparation was used) | Islet dispersion and flow cytometry | Islet dispersion and flow cytometry | Islet dispersion and flow cytometry |

This table was prepared following recommendations as per: Hart N.J., Powers A.C. 2019. Use of human islets to understand islet biology and diabetes: progress, challenges and suggestions. *Diabetologia* 62:212–222. Open source data on each islet preparation can be obtained at www.isletcore.ca.

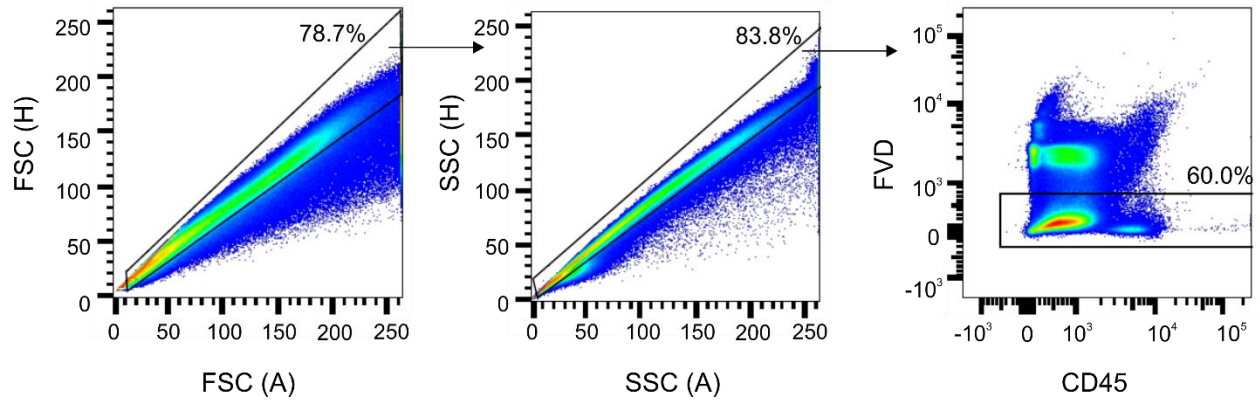
A 10 months - islets



B 10 months - spleen



Supplemental Figure 1. T cell subsets in 10 month-old mice. Islets (A) and spleens (B) were isolated from 10-month old mice for analysis of islet T cell subsets by flow cytometry. Cells were gated on FSC, SSC, viability (FVD-) and CD45+, and subsequently CD19, CD3, CD11b, CD8, CD4, and FoxP3; data are representative of 2 samples, (for islet samples, islets from 10 mice pooled per sample).



Supplemental Figure 2. Representative data from human islet preparations, dispersed and gated on FSC, SSC and viability (FVD-). FACS plots are representative of 3 independent biological samples. Numbers in FACS plots represent the percent of cells in each selection as a function of the parent population.