

## Supplementary Tables:

### Supplementary Table 1: Human Islet preparations

	Subject 1	Subject 2	Subject 3
Record ID	R271	R274	R314
Age of subject	60	42	54
Sex	F	M	M
BMI	25.9	25.2	26.4
HbA1c	5.5	n/a	5.1
purity	95%	75%	90%

Additional information available at: <https://www.epicore.ualberta.ca/IsletCore/>

### Supplementary Table 2 – PCR primers

Gene	Primer	Sequence (5' to 3')	size (bp)
<i>OR51S1</i>	forward	ACCATCCTCTGGATCATTGC	171
	reverse	CTGTAGAAGGCAGGCTGAGG	
<i>OR5B21</i>	forward	GTCTCTGGCTTCCTCAATGC	158
	reverse	GCCACAAAGACCACCAACTT	
<i>OR3A2</i>	forward	CCTCACCGTGGTTTGTCTTT	202
	reverse	CAGTGATCTCCTCCCCAAA	
<i>OR4D6</i>	forward	TCTTCACTTCGTGCCTTGTG	153
	reverse	TGCATGGCTGACTTCATCTC	
<i>OR6C74</i>	forward	TGACGCTCCTGGTTACACTG	153
	reverse	TGCAGCTGCCATAAGAAATG	
<i>OR2C1</i>	forward	AACCAAGGCATGTTCTGAC	202
	reverse	TGTGGGCAACAGAGACAGAG	
<i>Sry</i>	forward	TTGTCTAGAGAGCATGGAGGGCCATGTCAA	273
	reverse	CCACTCCTCTGTGACACTTTAGCCCTCCGA	

### Excel files:

**Supplementary Table 3** – Entities changed by  $\geq 5$ -fold in the islets of NOD vs. age-matched NOD.B10 mice

**Supplementary Table 4** – Significantly impacted pathways

**Supplementary Table 5**– Significantly impacted GO terms

**Supplementary Table 6** - Kolmogorov-Smirnov test for normal Gaussian distribution of data