

**Supplementary Table 1.** Characteristics of study subjects used in the PCR verification.

Mean  $\pm$  SD; \* p<0.05 , † p<0.005 vs. lean controls. NA=not assessed. To convert to mg/dL divide: glucose by 0.0555, cholesterol by 0.0259 and triglycerides by 0.0113. To convert insulin to mU/L divide by 6.945.

	<b>Lean Controls</b>	<b>Obese</b>	<b>Obese T2DM</b>
Subjects in Group	6	7	11
Gender (M/F)	0/6	1/6	1/11
Age (years)	39.1 $\pm$ 9.8	36.4 $\pm$ 9.8	47.0 $\pm$ 11.9
Body mass index (kg/m <sup>2</sup> )	22.6 $\pm$ 3.5	49.1 $\pm$ 6.9 †	47.2 $\pm$ 7.0 †
Duration of DM (years)	NA	NA	1.5 $\pm$ 2.9
Hemoglobin A1c	5.2 $\pm$ 0.3	5.2 $\pm$ 0.2	7.1 $\pm$ 1.7 †
Fasting Glucose (mmol/L)	4.6 $\pm$ 0.8	5.3 $\pm$ 0.4	7.7 $\pm$ 0.4 *
Fasting Insulin (pmol/L)	62.5 $\pm$ 38.8	166.7 $\pm$ 113.2*	345.9 $\pm$ 235.4*
HOMA-IR	2.2 $\pm$ 2.0	5.4 $\pm$ 3.1*	20.2 $\pm$ 11.3
Si (Insulin Sensitivity)	NA	1.13 $\pm$ 0.90	0.26 $\pm$ 0.22
Sg (Glucose Effectiveness)	NA	0.014 $\pm$ 0.006	0.014 $\pm$ 0.004
Cholesterol (mmol/L)	4.6 $\pm$ 0.7	5.7 $\pm$ 0.3 *	4.5 $\pm$ 0.9
LDL – cholesterol (mmol/L)	3.1 $\pm$ 0.7	3.7 $\pm$ 0.7	2.5 $\pm$ 0.6
HDL – cholesterol (mmol/L)	1.2 $\pm$ 0.3	1.0 $\pm$ 0.1	1.2 $\pm$ 0.2
Triglycerides (mmol/L)	0.7 $\pm$ 0.2	2.1 $\pm$ 0.7	1.6 $\pm$ 1.0
ALT (U/L)	25 $\pm$ 8	29 $\pm$ 8	31 $\pm$ 19
AST (U/L)	32 $\pm$ 11	24 $\pm$ 4	29 $\pm$ 12