Supplementary Files -

The Role of Inflammation in β-cell Dedifferentiation

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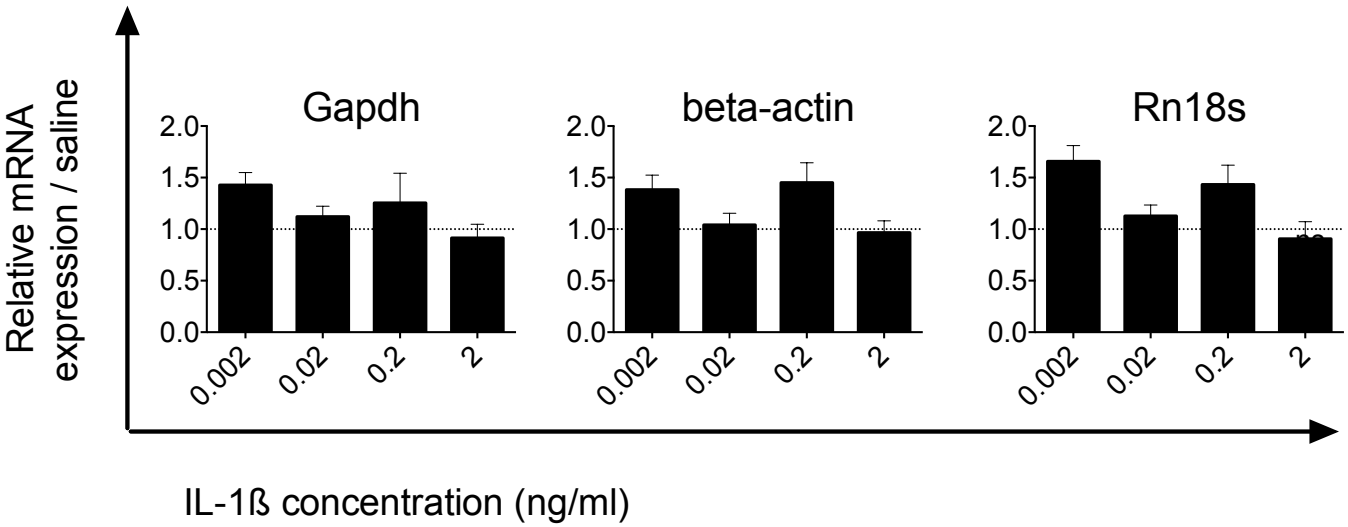
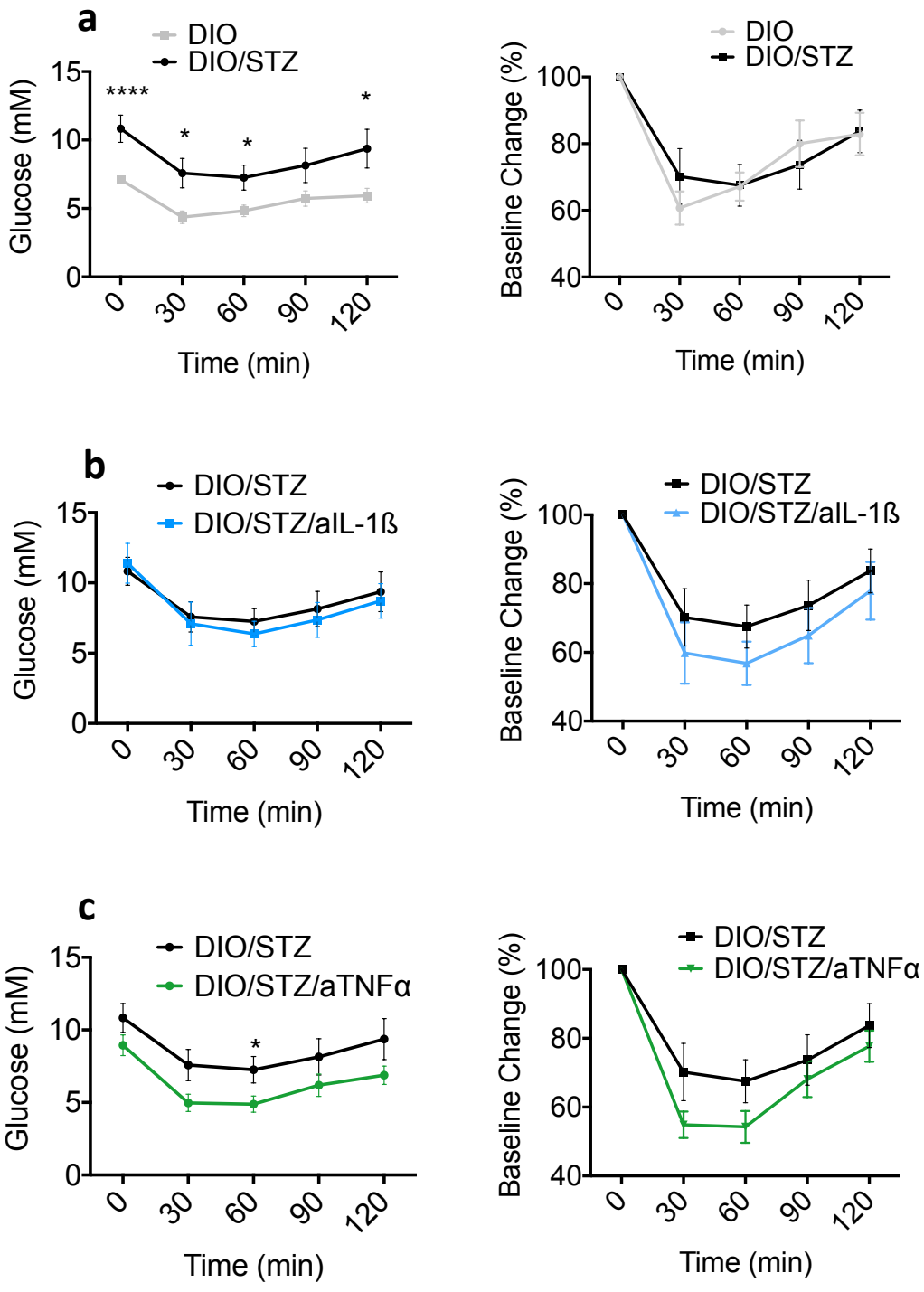
Suppl. Fig. 2.

a


Relative mRNA expression / saline
Gapdh
beta-actin
Rn18s
2.0
1.5
1.0
0.5
0.0
0.002
0.02
0.2
2
IL-1ß concentration (ng/ml)


a
DIO
DIO/STZ
Glucose (mM)
15
10
5
0
****
*
*
*
0
30
60
90
120
Time (min)
DIO
DIO/STZ
Baseline Change (%)
100
80
60
40
0
30
60
90
120
Time (min)
b
DIO/STZ
DIO/STZ/aIL-1ß
Glucose (mM)
15
10
5
0
0
30
60
90
120
Time (min)
DIO/STZ
DIO/STZ/aIL-1ß
Baseline Change (%)
100
80
60
40
0
30
60
90
120
Time (min)
c
DIO/STZ
DIO/STZ/aTNFα
Glucose (mM)
15
10
5
0
*
0
30
60
90
120
Time (min)
DIO/STZ
DIO/STZ/aTNFα
Baseline Change (%)
100
80
60
40
0
30
60
90
120
Time (min)

Suppl. Fig. 3.

Supplementary Fig. 2.

Housekeeping gene expression upon various doses of IL-1 β

mRNA expression levels of the housekeeping genes *Gapdh*, *beta-actin* and *Rn18s* in mouse islets after 24 hours of exposure to various concentrations of IL-1 β relative to solvent (dashed line).

(a-b) n=9-10 per condition, representing the sum of 3 independent experiments. (c) n=6-7 per condition, representing the sum of 2 independent experiments. *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001 of treatment group vs. untreated control. Statistical significance (P) was determined using the two-tailed Mann-Whitney U. All error bars denote s.e.m.

Supplementary Fig. 3.

Insulin tolerance test upon in vivo anti-inflammatory treatment

Glucose levels and corresponding change from baseline following an ITT in (a) DIO and DIO/STZ, (b) DIO/STZ ± aIL-1 β treatment and (c) DIO/STZ ± aTNF α treatment.

n=10 each, pooled from 2 independent experiments. n represents the number of mice. *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001. Statistical significance (P) was determined using the two-tailed Mann-Whitney U. All error bars denote s.e.m. DIO, diet-induced obese; DIO/STZ, diet-induced obese / streptozotocin; ITT, insulin-tolerance test.