



**Fig. S2**

## **Supplemental Figure S2**

The upper four graphs depict the NAD(P)H fluorescence traces , the lower four graphs depict the simultaneously measured FAD fluorescence traces when NMRI mouse islets were perfused with 0 mM glucose from 0 min to 60 min, with 30 mM glucose from 60 min to 100 min and with 0 mM glucose thereafter (upper rows) or when this protocol was executed in the presence of 500  $\mu$ M tolbutamide (lower rows).

The black traces depict the fluorescence of the fresh islets , the red traces depict the fluorescence of the 22h-cultured islets.

To generate mean values the fluorescence intensity of each single experiment is normalized to 100 % at 60 min for the fresh islets. The corresponding value of the cultured islets is given as percent of the value of the fresh islets.