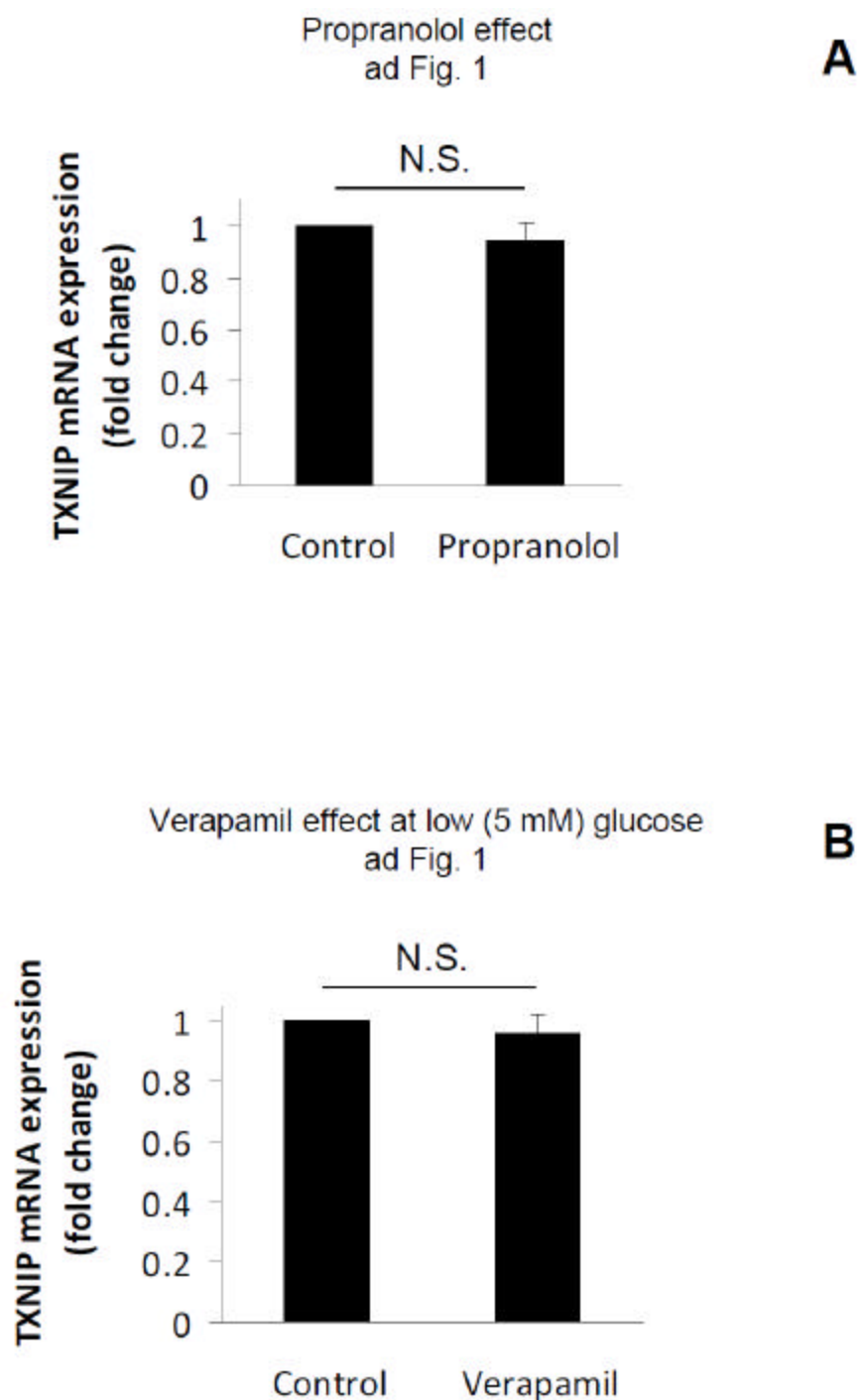


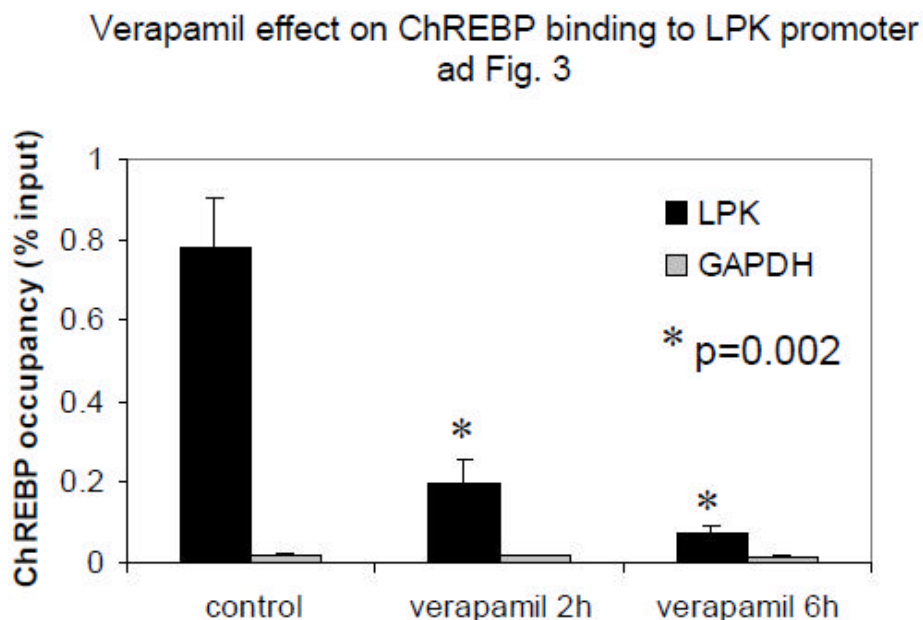
SUPPLEMENTARY DATA

Supplementary Figure 1. Specificity of TXNIP mRNA downregulation. (A) INS -1 cells were grown in 11.1mM glucose and treated for 24h with propranolol (10 μ M) as an example of another antihypertensive agent. (B) INS-1 cells were incubated at 5mM glucose and treated for 24h with verapamil (50 μ M) as in Fig. 1. TXNIP mRNA expression was assessed by qRTPCR. Bars represent means $\pm$ SEM of 3 independent experiments.

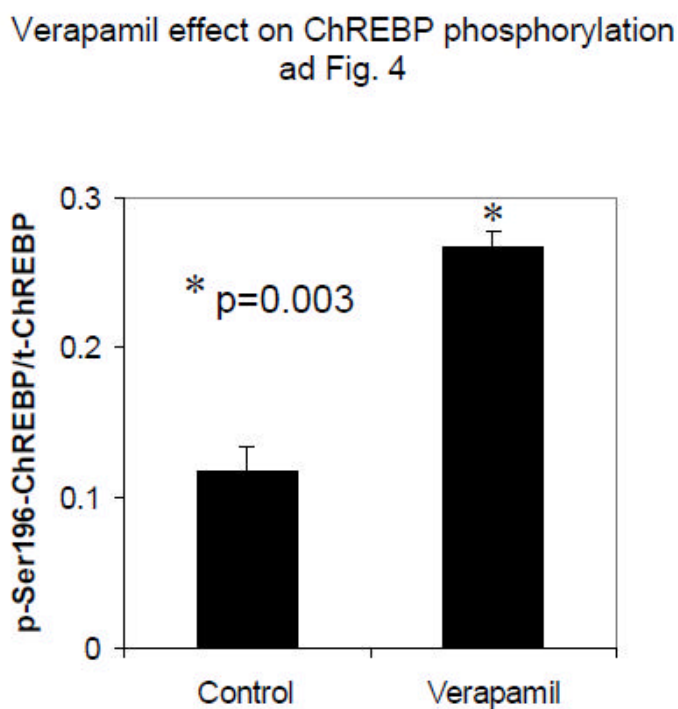


SUPPLEMENTARY DATA

Supplementary Figure 2. ChIP analysis of ChREBP binding to the LPK promoter in response to verapamil. INS-1 cells were treated with verapamil (100 μ M) for the designated times and ChIP assays were performed. Bars represent means $\pm$ SEM of 3 independent experiments.

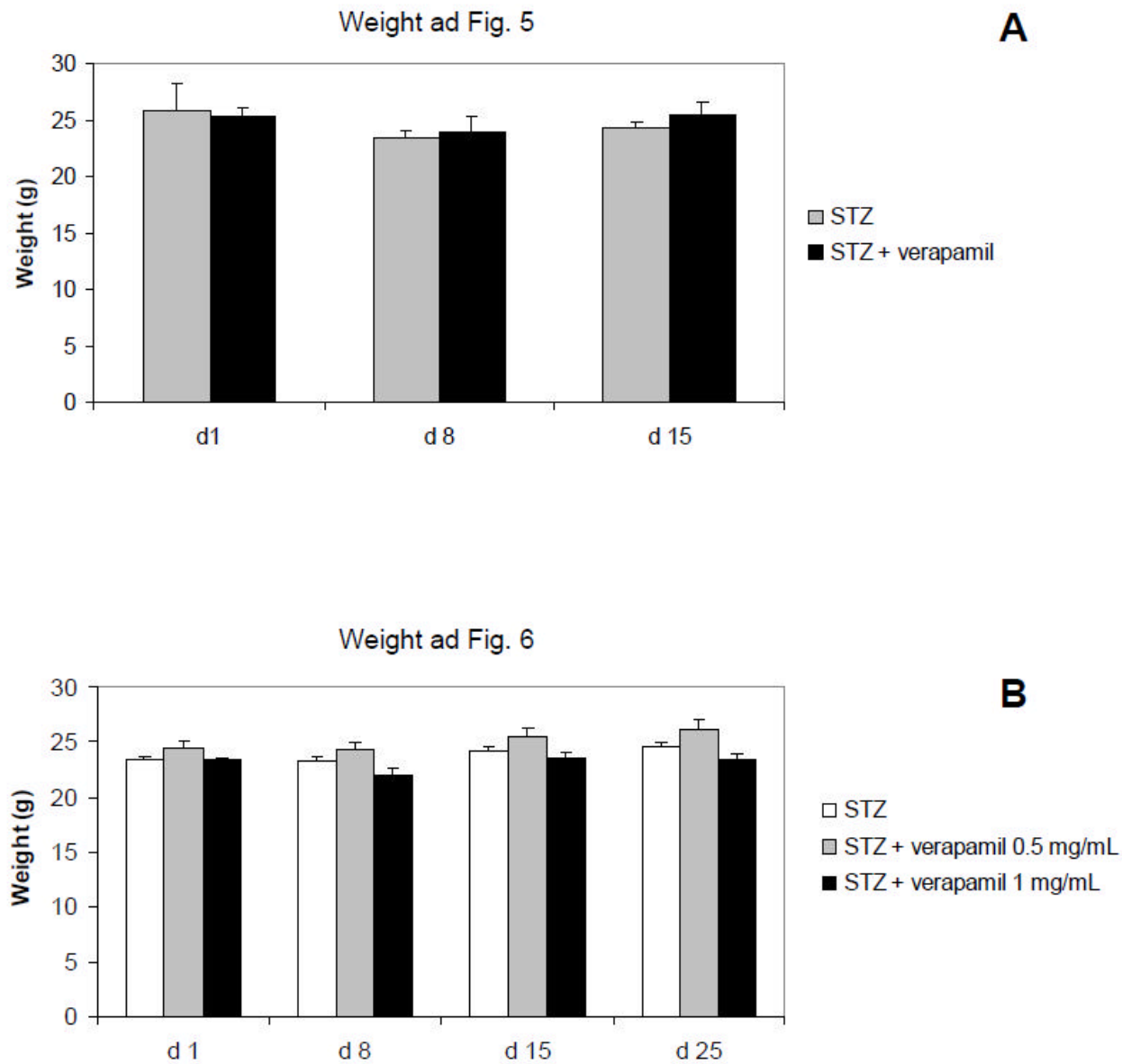


Supplementary Figure 3. Verapamil effects on ChREBP phosphorylation. INS -1 cells were grown in 11.1mM glucose and treated for 24h with verapamil (50 μ M) prior to preparation of protein lysates and assessment of phosphorylated ChREBP (p-Ser196-ChREBP) using a specific phospho-ChREBP antibody detecting only ChREBP phosphorylated on Ser196. The ratio of phosphorylated ChREBP to total ChREBP (t-ChREBP) is shown and bars represent means $\pm$ SEM of 3 independent experiments.



SUPPLEMENTARY DATA

Supplementary Figure 4. Weight in verapamil treated STZ-diabetic mice. (A) Weight of male C57BL/6 mice receiving multiple low-dose STZ injections followed by verapamil in their drinking water (100 mg/kg/d) (black) or left untreated (grey); (n=3 per group). (B) Weight of male C57BL/6 mice rendered overtly diabetic by multiple lowdose STZ injections (blood glucose >250 mg/dL) and starting at day 15 treated with verapamil in their drinking water at (1 mg/mL: black), (0.5 mg/mL: grey) or left untreated (white); (n=4-8 mice per group).



SUPPLEMENTARY DATA

Supplementary Figure 5. BTBR $lep_{ob/ob}$ mice as a model of severe obesity, insulin resistance and diabetes were treated with verapamil (1 mg/mL) in their drinking water starting at 4 weeks of age (black) or left untreated (grey); (n=8-10 mice per group). **(A)** Mean weight $\pm$ SEM. **(B)** Verapamil effects on islet TXNIP protein levels corrected for beta-actin.

