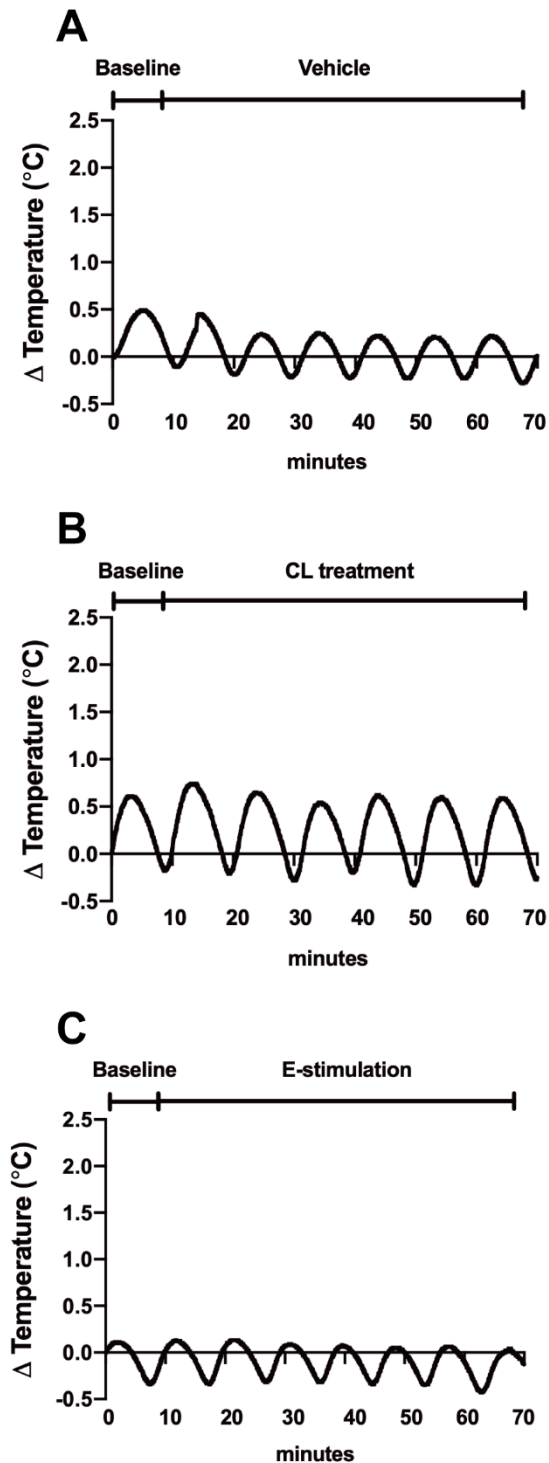
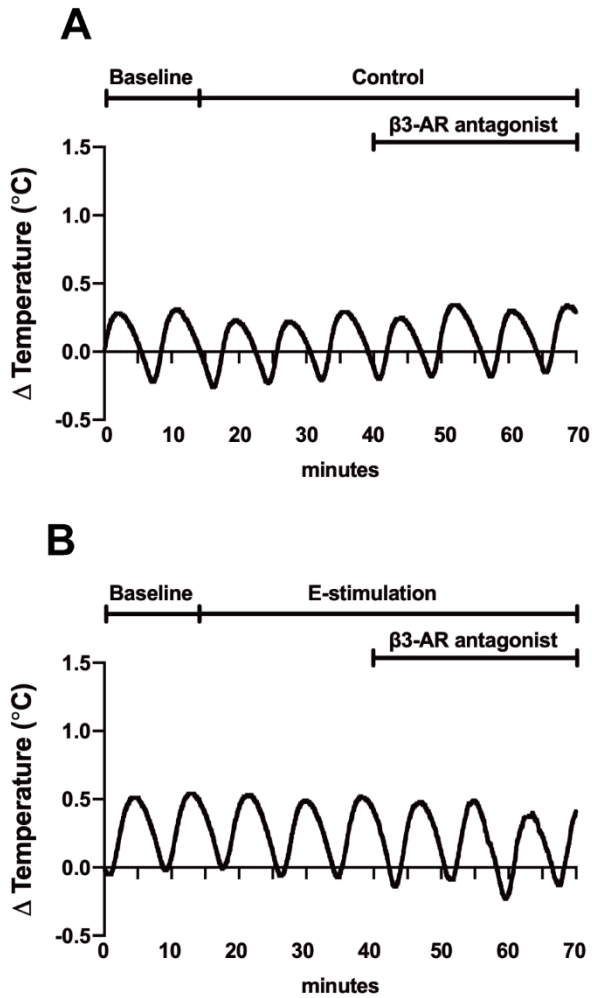


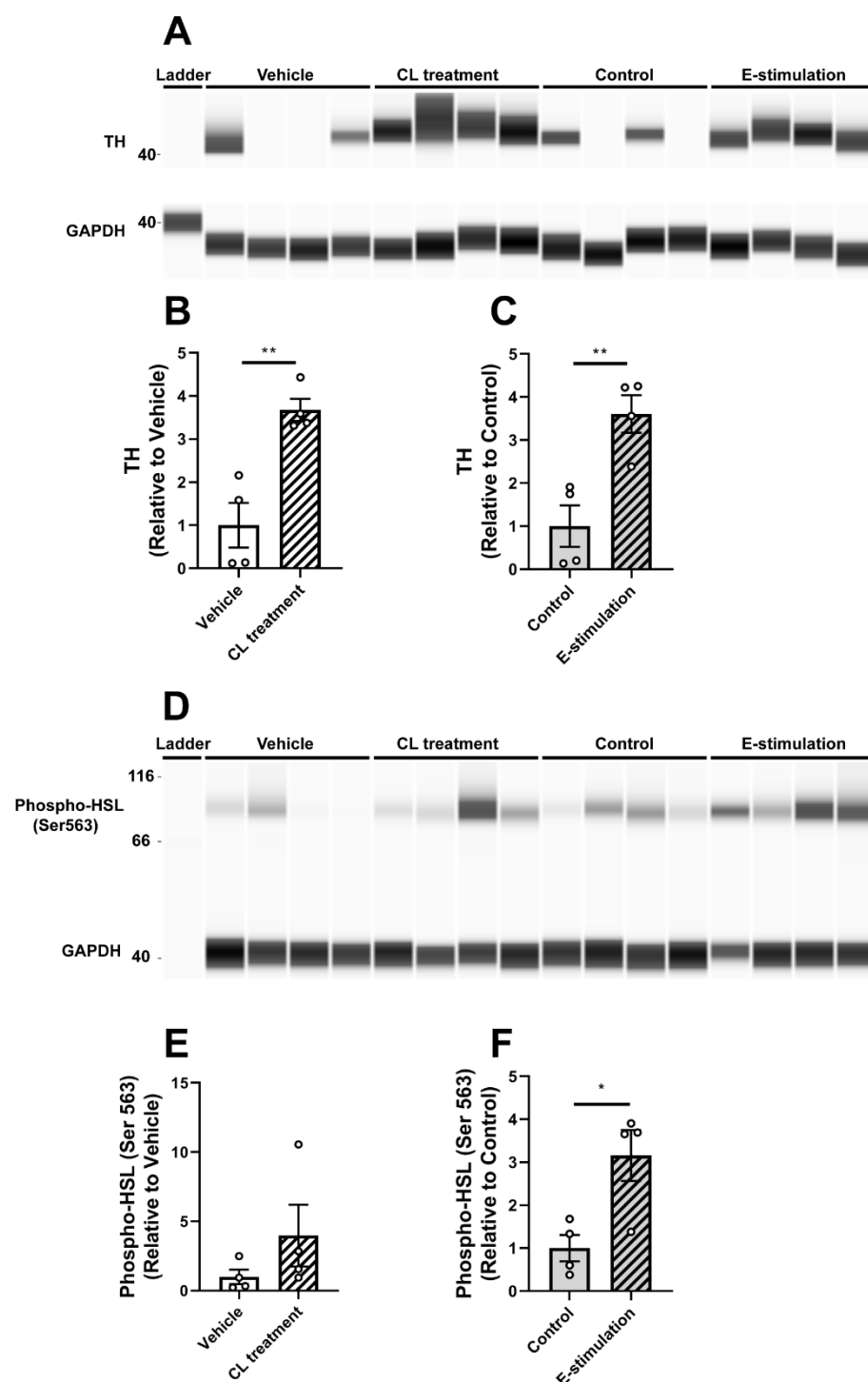
## Supplementary Figures



**Figure S1. Electrical neurostimulation does not influence the core body temperature.** After recording core body temperature for 10 min (baseline), mice received vehicle (A), CL316243 (CL treatment) (B), or electrical neurostimulation (E-stimulation) of the left BAT lobe for 60 minutes (C), during which core body temperature was still recorded. The temperature changes were calculated as average curves (n=4 mice per group).



**Figure S2.  $\beta$ 3-adrenergic antagonism without and with electrical neurostimulation does not influence the core body temperature.** After recording core body temperature for 10 min, mice were sham-operated (control, A) or received electrical neurostimulation (E-stimulation) of the left BAT lobe for 60 minutes (B), during which core body temperature was still recorded. After 30 min of intervention, all mice in addition received a  $\beta$ 3-adrenergic ( $\beta$ 3-AR) antagonist by subcutaneous injection. The temperature changes were calculated as average curves (n=4 mice per group).



**Figure S3. Electrical neurostimulation acutely increases tyrosine hydroxylase and phosphorylated hormone-sensitive lipase in BAT.** After intervention with vehicle or CL16243, or electrical neural sympathetic stimulation (E-stimulation) of the left BAT lobe, BAT was collected and lysed for western blot. The protein level of tyrosine hydroxylase (TH) (A) and phospho-hormone-sensitive lipase (HSL) (D) were quantified (B, C, E, F). Differences between the groups were determined with a two-tailed Student unpaired t-test. Data are shown as mean  $\pm$  SEM (n=4 mice per group). \*P<0.05, \*\*P<0.01.