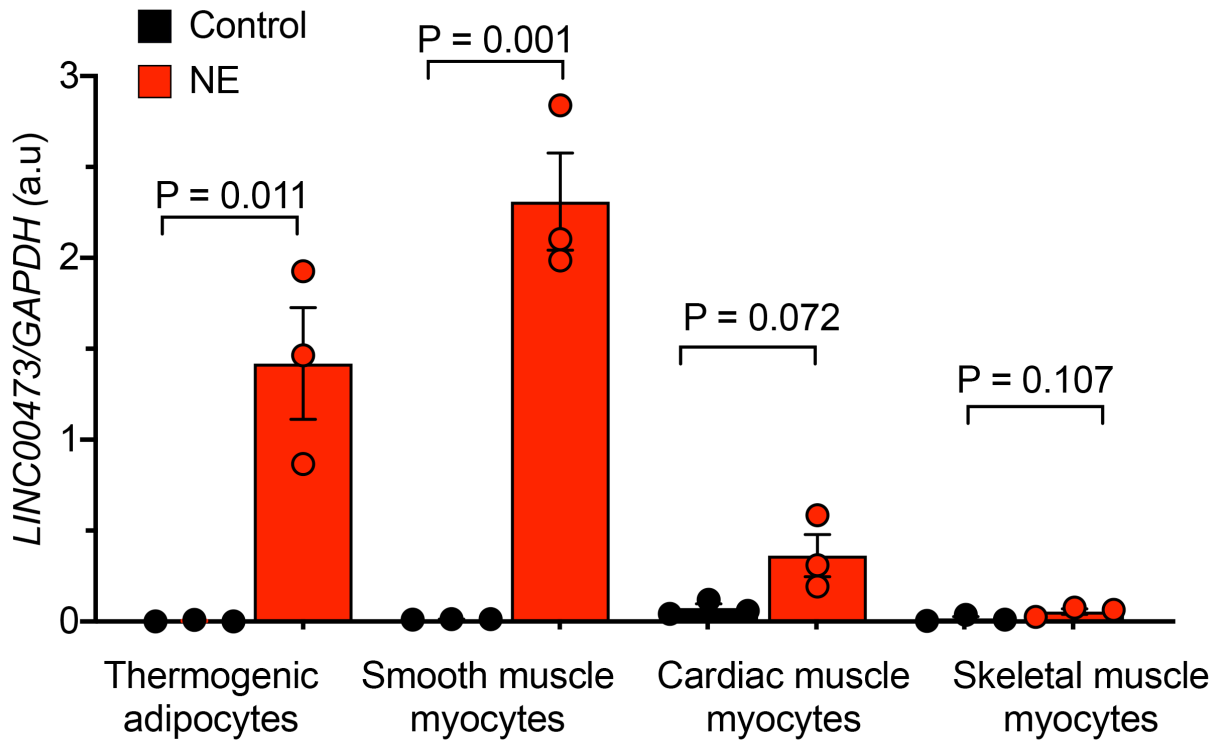
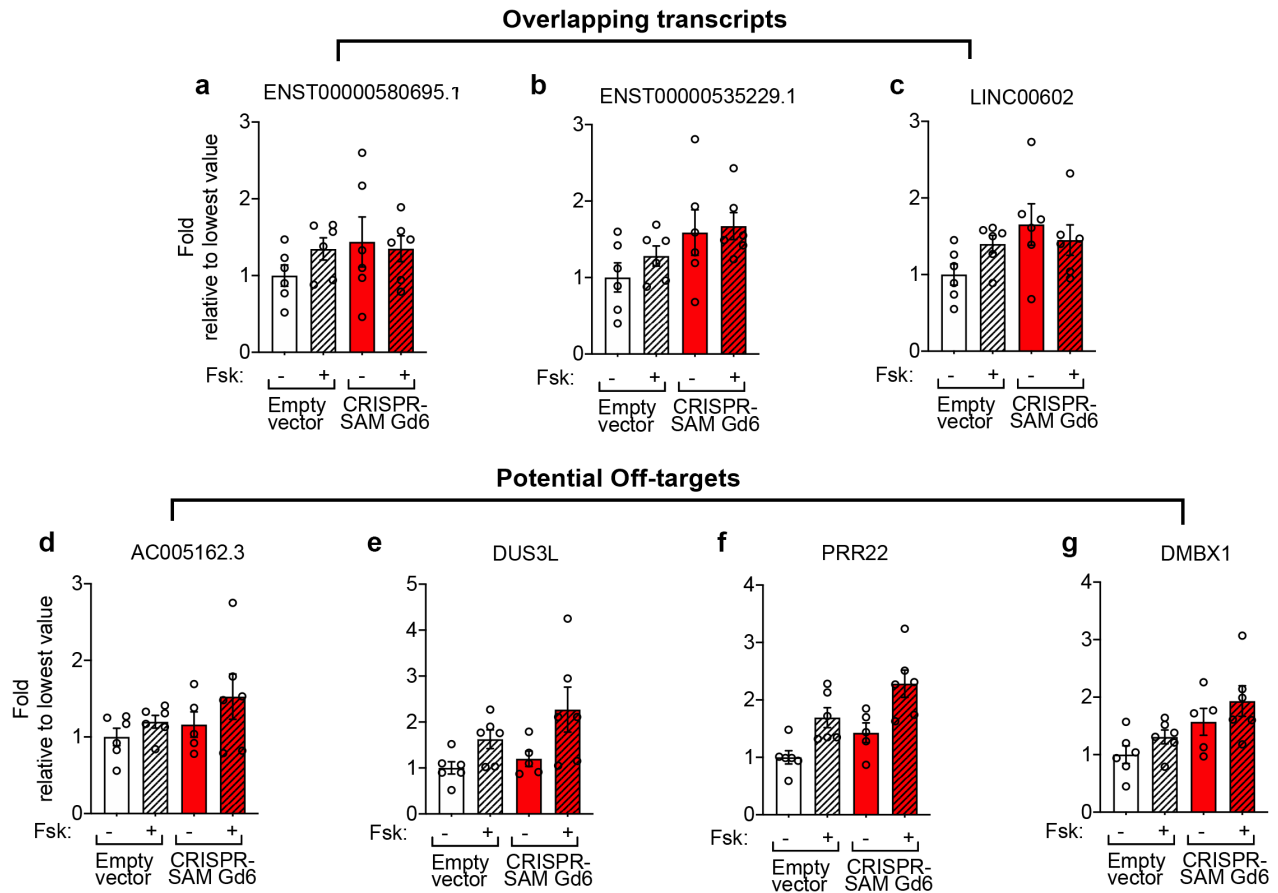


**SUPPLEMENTARY INFORMATION:**

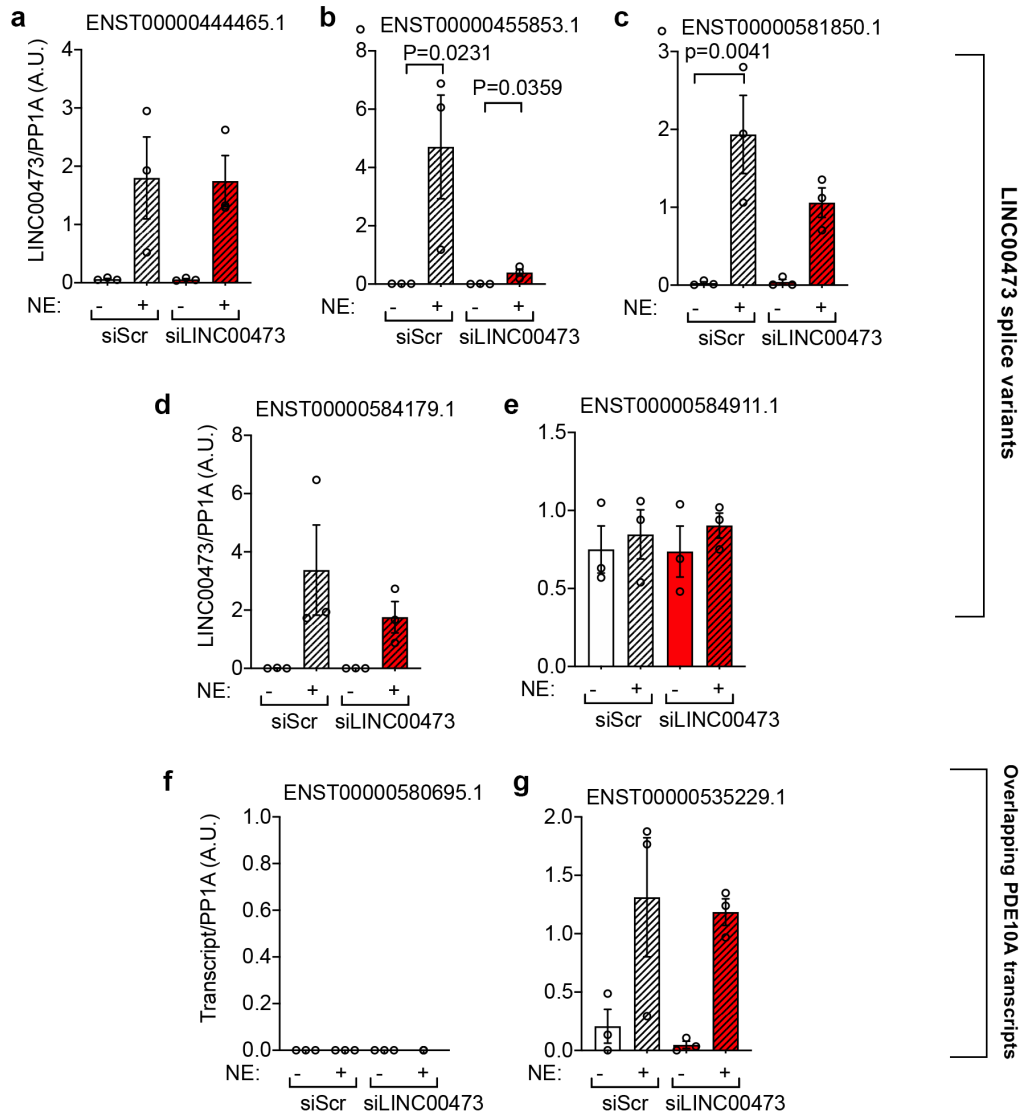


**Supplementary Figure 1. Expression of *LINC00473* in human cell types.** Expression levels of *LINC00473* in four norepinephrine responsive human cell types. Differentiated Cardiac Myocytes, Skeletal Myocytes, Thermogenic Adipocytes and Smooth Myocytes were stimulated with 10  $\mu$ M Norepinephrine (NE) or control media for 4 hours before harvest. Plotted are individual values, means and SEM from n=3 independent cultures assayed with no technical replication. Statistical differences were calculated using un-paired, two-tailed student t-tests.



**Supplementary Figure 2. Investigation of potential off-targets in the CRISPR-SAM system.**

**a-c.** Expression levels of three overlapping transcripts, where **a.** and **b.** are *PDE10A* transcripts transcribed from the same strand as *LINC00473* and **c.** *LINC00602* is transcribed from the opposite strand. **d-g.** The expression of four potential off-target transcripts based on sequence homology. Plotted are individual values, means and SEM from n=6 independent cell cultures assayed without technical replication. Statistical significance of the differences was calculated using one-way ANOVA, corrected for multiple comparisons using the Sidak test. Where P values are < 0.05, the precise value is indicated.



**Supplementary Figure 3. Investigation of potential siRNA off-target effects on overlapping transcripts.** Expression levels of the 5 *LINC00473* splice variants (a-e), and two overlapping PDE10A transcripts (f,g) in primary differentiated supraclavicular adipocytes transfected with 20 nm siRNA targeting the ENST00000455853.1 variant and stimulated without (-) or with (+) 10  $\mu$ M Norepinephrine for 4 hours. Plotted are the individual values, means and SEM of n=3 independent experiments. Statistical significance of the differences for each transcript was calculated using one-way ANOVA, corrected for multiple comparisons using the Sidak test. Exact P values are indicated in instances where  $P < 0.05$ .