



**S4 Fig. Saturated fatty acids induce ER stress on hypothalamic cells.** Relative expression of (A) *Atf4*, (B) *Atf6*, (C) *Xbp1*, (D) *Bip*, and (E) *Chop* mRNA in mouse hypothalamic mHypoE-N43/5 cells treated with either vehicle (BSA with 0.1% ethanol), palmitic (PA; 250  $\mu$ M), lauric (LA; 1mM), myristic (MA; 200  $\mu$ M), oleic acids (OA; 250  $\mu$ M), or a combination of these fatty acids for 24 hours ( $n = 4$  cultures per condition). Data are presented as mean + SEM. \* $P \leq 0.05$ , \*\* $P \leq 0.01$ , \*\*\* $P \leq 0.001$ , and \*\*\*\* $P \leq 0.0001$  versus vehicle group. Statistical significance was determined by one-way ANOVA followed by Tukey's Multiple Comparison test. The underlying data are provided in S1 Data.