



Supplementary Fig. 3. mRNA and protein levels in hypothalamus. (A) Heatmap clustering of hypothalamus samples from vehicle and celestrol treated rats based on RNA-seq analysis. (B) Normalized counts of genes involved in leptin signaling pathway. (C) Western blot analysis and (E) intensity analysis of phosphorylated protein kinase-like endoplasmic reticulum kinase (PERK) and total PERK protein in hypothalamus from vehicle, vehicle+antibiotics, celestrol, celestrol+antibiotics treated rats. (D) mRNA expression level of X-box binding protein 1 (*Xbp1*). (F) mRNA expression level of *Perk*. Error bars are represented as mean \pm standard error of mean. (D, F) *P* values were determined by Student's *t*-test. *Adcy5*, adenylate cyclase 5; *Agrp*, agouti-related peptide; *Foxo1*, forkhead box O1; *Jak2*, Janus kinase 2; *Lepr*, leptin receptor; *Npy*, neuropeptide Y; *Pik3r1*, phosphoinositide-3-kinase regulatory subunit 1; *Plcb1*, phospholipase C beta 1; *Pomc*, pro-opiomelanocortin; *Prkacb*, protein kinase cAMP-activated catalytic subunit beta; *Socs3*, suppressor of cytokine signaling 3; *Stat3*, signal transducer and activator of transcription 3; NS, not significant.