S-Table 1. The sequences of the primers used for quantitative real-time PCR

Genes	Forward	Reverse
PRDM16	cagcaacctccagcgtcacatc	gcgaaggtcttgccacagtcag
TBX1	caccaaggcaggcagacgaatg	ctacgggcacaaagtccatgagc
CPT1a	agccagactcctcagcagcag	caccatagccgtcatcagcaacc
MCAD	cgaagagttggcgtatgggtgtac	catcattggctgctccgtcatcc
PPARα	acgatgctgtcctccttgatgaac	gatgtcacagaacggcttcctcag
PGC1α	gtgccaccgccaaccaagag	ttcctcgtgtcctcggctgag
ATGL	acaccagcatccagttcaaccttc	gtccatctctgtagccctgtttgc
HSL	gcacggcggctgtctaatgtc	cgttggctggtgtctctgtgtc
TFAM	tgtggagggagctaccagaagc	gtctctgccgggcctccttc
NRF1	tctgctgtggctgatggagagg	gatgcttgcgtcgtctggatgg
NRF2	caacccgaagcacgctgaagg	ggacgctcggctgggactc
TMEM26	cctggtcgccgtctggagag	gcctcgtccgcgcttgaac
CD137	gctgctgctagtgggctgtg	cagttcggctgtccacctatgc
HOXC8	gcaagaggcgagcgtggtg	tgaggctgggagacgagttctg
UCP1	caccacactcctggcctctcc	acatggacatcgcacagcttgg
Cidea	ggagaccgccagggactacg	agggcgagctggatgtatgagg
β-actin	gtccctcaccctcccaaaag	gctgcctcaacacctcaaccc
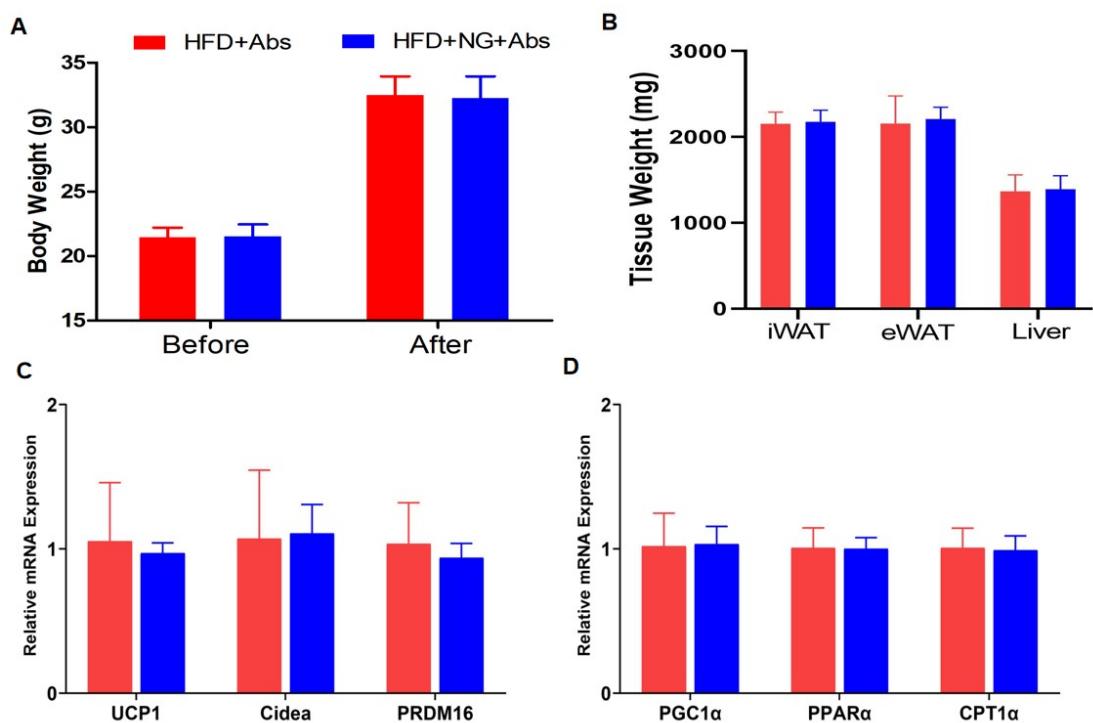
S-Figure 1. Effects of antibiotics treatment on body weight and browning in NG treated HFD fed mice. (A) Body weight for each group mice (n = 6). (B) The weight of iWAT, eWAT and liver (n = 6). (C) The expression of thermogenic-related genes (UPC1, PRDM16, and Cidea) in iWAT for each group mice (n = 4). (D) The expression of fatty acid oxidation-related genes (PGC1α, PPARα, CPT1a) in iWAT for each group mice (n = 4). Results are presented as mean ± SD.