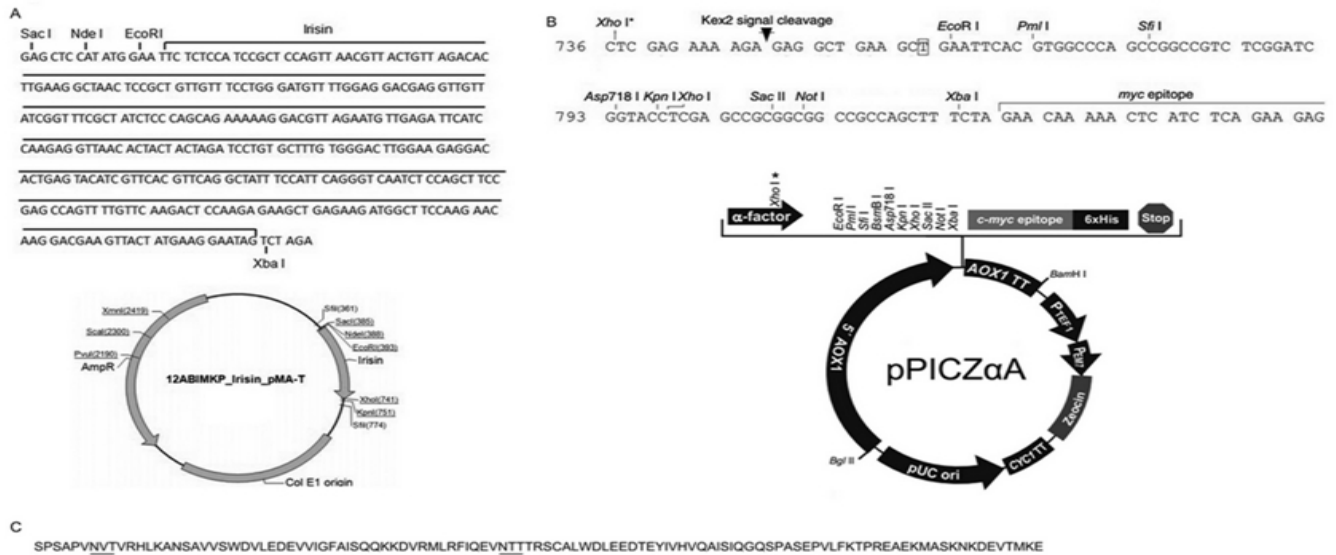
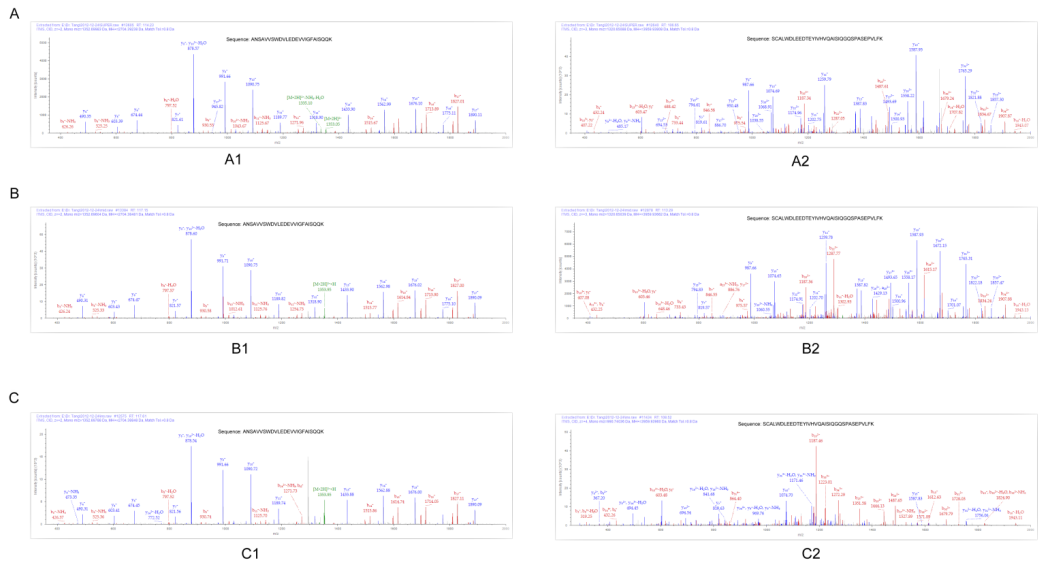


SUPPLEMENTARY DATA

Supplementary Figure 1. Map of 12ABIMPKP and nucleotide sequence of synthesized irisin (A), map of pPICZ α A (B), and synthesized protein sequence of human irisin (C).

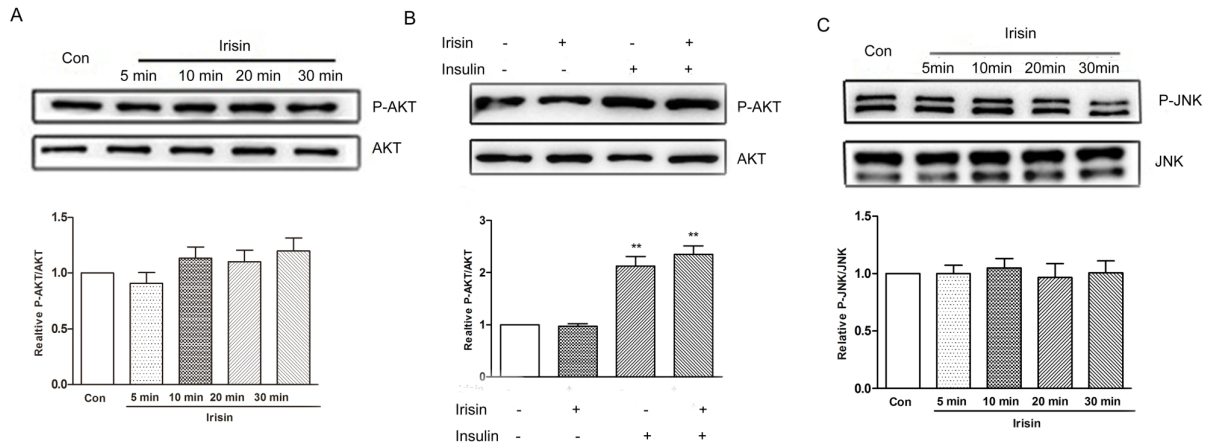


Supplementary Figure 2. Confirming irisin protein identity of the three bands by MALDI-TOF mass spectrometry. Sequest and Mascot database search software were used to identify proteins by matching experimental peptide masses and peptide fragment masses. Here, we listed two high score peptides identified both by Sequest and Mascot in three bands, separately. The two high score peptides identified in the upper band (A), middle band (B) and lower band (C).



SUPPLEMENTARY DATA

Supplementary Figure 3. Phosphorylation of AKT and JNK in 3T3-L1 adipocytes by Western blot. Adipocytes were treated as indicated in the figures and cell lysates were processed for probing p-AKT (A and B) and p-JNK (C). Irisin was used at 20 nM at indicated time points and insulin (100 nM) for 20 min. The bar graph represents the ratio of p-AKT/AKT, or p-JNK/JNK, and is normalized against the control group. Data are expressed as mean \pm SE of three independent experiments. (** $p < 0.01$ vs. control group).



Supplementary Figure 4. Quantitative PCR analysis for indicated mRNAs in inguinal WAT collected at day 14 post-treatment with saline or r-irisin in HFD- treated mice.

