

Irisin Recombinant Protein

Irisin: Human, Tagless (Recombinant protein)

CATALOG # AAA60557	HOST E Coli	APPLICATIONS Western Blot, ELISA
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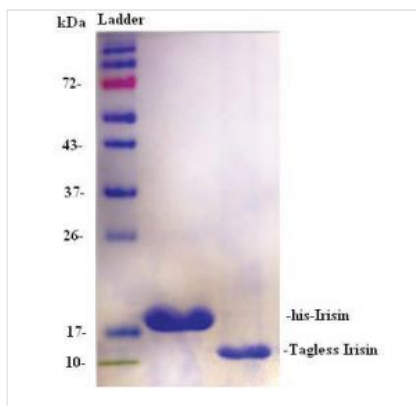
PRODUCT SYNONYMS

Irisin; Irisin: Human; Tagless (Recombinant protein); tagless; Recombinant Irisin (Human); Irisin recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>95%; SDS PAGE to determine purity of the protein
Form/Format	Lyophilized in 1mg/mL in PBS
Sequence	GAMGSDSPSA PVNVTVRHLK ANSAVSWDV LEDEVVIGFA ISQKKDVRM ILRFIQEVNT TTRSCALWDL EEDTEYIVHV QAISIQGQSP ASEPVLFKTP REAEKMASKN KDEVTMKEMG RNQQLRT
Applicable Applications for Irisin recombinant protein	WB (Western Blot), ELISA
Species	Human
Reconstitution	Add deionized water to prepare a working stock solution of approximately 1mg/mL and let the lyophilized pellet dissolve completely.
Quality Control Test	BCA to determine quantity of the protein.
Preparation and Storage	Store lyophilized protein at -20 degree C. Aliquot reconstituted protein and store at -80 degree C. Avoid repeated freezing /thawing cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for Irisin recombinant protein	Exercise enhances muscular endurance and strength, calories expenditure, and prevents the development of obesity and type 2 diabetes. These effects of exercise cannot be explained solely by the expenditure of calories in muscle. A recent study indicated that a novel hormone, irisin, plays an important role in the increase of total body energy expenditure by exercising muscle. Irisin is a cleaved and secreted fragment of a membrane protein FNDC5. And its circulating concentrations are increased after regular physical activity. Exercise induces the transcriptional regulator PGC-1alpha in the skeletal myocyte, which in turn drives the production of the FNDC5. Animal experiments suggested that irisin, cleaved form FNDC5, activates thermogenic programs in white adipose tissue ("browning"), including mitochondrial biogenesis and the expression of uncoupling protein 1 (UCP1), leading to mitochondrial heat production and energy expenditure. Irisin is highly conserved across species, and exercise also increases circulating irisin concentrations in humans. Therefore, the role of irisin in humans may be that it links physical activity to energy metabolic homeostasis, including weight control. The recombinant irisin is the extracellular domain of FNDC5 (Asp16 to Thr136). Total 126 AA. Mw: 14kDa (calculated). N-terminal His-tag removed, 5 extra AA left.
References	1. Irisin as a muscle-derived hormone stimulating thermogenesis - A critical update. Hofmann T, Elbelt U, Stengel A. Peptides. 2014 26;54C:89-100 2. Muscles, exercise and obesity: skeletal muscle as a secretory organ. Pedersen BK, Febbraio MA. Nat Rev Endocrinol. 2012 8(8):457-65

NCBI AND UNIPROT INFORMATION

Molecular Weight	14kDa (Calculated)
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/irisin-recombinant-protein-e-coli-wb-western-blot-elisa/60557>