Irisin (human), (recombinant) (active)

First to market active Irisin.

Irisin is a hormone that is involved in converting white adipose tissue into brown adipose tissue after physical exercise. It is formed after the membrane bound protein fibronectin type III domain containing protein 5 (FNDC5) is cleaved resulting in a secreted protein. FNDC5 is found in muscle tissue and is activated during physical exertion via the protein PGC1a. Soluble Irisin has also been shown to up regulate UCP-1 gene expression in mice. UCP-1 is a mitochondrial transporter protein and a marker of brown adipose tissue conversion. This suggests that Irisin plays an important role in energy regulation and furthermore may lead to improvements in glucose regulation, insulin sensitivity, hypertension, and obesity.

Citations: 7 View Online »

Ordering Information

Order Online »

ADI-908-307-0010	10µg

Manuals, SDS & CofA

View Online »

- First to market active Irisin
- Multifunctional protein validated for activity assay, ELISA, SDS-PAGE and Western blot
- Important regulatory protein for metabolism and neurogenesis

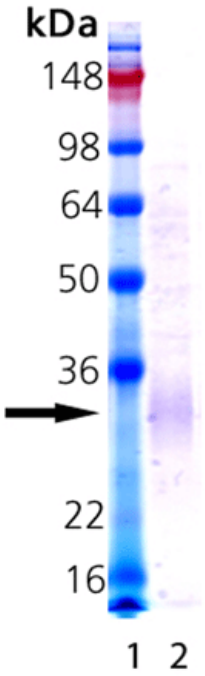


Figure 1: Coomassie stained SDS-PAGE analysis of Irisin (human) (rec). Lane 1: Molecular weight marker, Lane 2: 1µg Irisin.

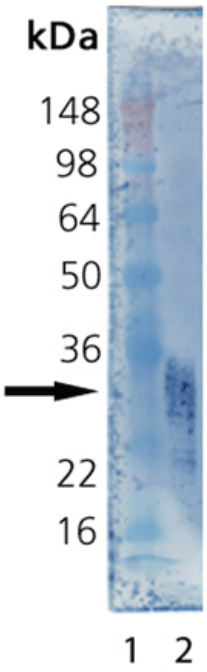


Figure 2: Western blot analysis of Irisin (human) (rec) against mouse anti-flag antibody. Lane 1: Molecular weight marker, Lane 2: 0.1µg Irisin.

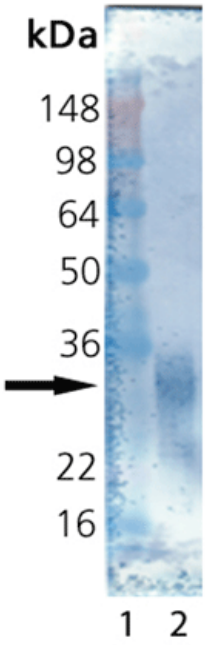


Figure 3: Western blot analysis of Irisin (human) (rec) against rabbit anti-FNDC5 antibody. Lane 1: Molecular weight marker, Lane 2: 0.1µg Irisin.

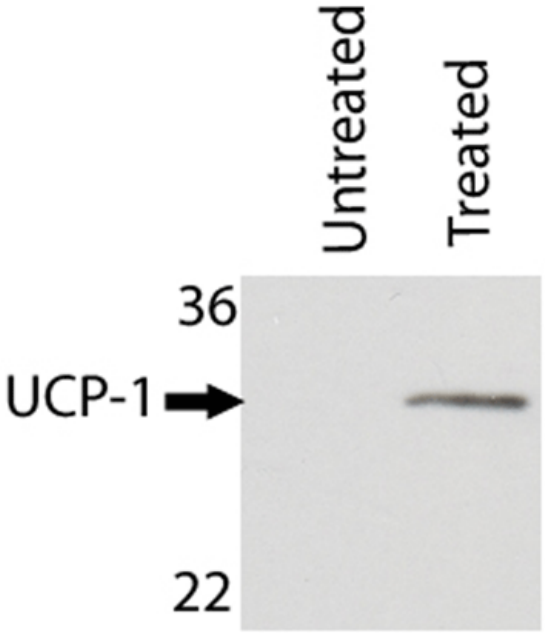


Figure 4: Stimulation of UCP-1 after treatment with Irisin (human) (rec). 3T3L1 cells were treated with or without 2µg/ml Irisin. After 48 hours the cells were lysed, normalized to total protein, and run on an SDS-PAGE. Gels were transferred to nitrocellulose and blotted against rabbit anti-UCP-1 antibody.

Handling & Storage

Use/Stability	Stable for up to a week when stored at +4°C and at least 6 months when stored at -80°C.
Handling	Avoid freeze/thaw cycles.
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	FNDC5, FRCP2
Biological Activity	Treatment of 3T3L1 with 2µg/ml Irisin induces UCP-1 expression.
Endotoxin Content	<0.01EU/µg
Formulation	Liquid. In 1X PBS.
MW	~25kDa
Purity	≥90% (SDS-PAGE)
Source	Produced in CHO cells. aa 32-143, also known as Irisin, comprises the majority of the extracellular domain of FNDC5. It is fused at the N-terminus to a FLAG®-tag with an 8 aa linker between the FLAG®-tag and Irisin.
Technical Info / Product Notes	FLAG is a registered trademark of Sigma-Aldrich Co.
UniProt ID	Q8NAU1

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