Irisin Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Fibronectin Type III Domain-containing Protein 5, Fibronectin Type III Repeat-containing Protein 2, FNDC5

Cat. No.:
RD172359100 (0.1 mg)

Description

Total 122 AA. MW: 13.8 kDa (calculated). UniProtKB acc.no. Q8NAU1 (Asp32-Glu143). N-terminal His-tag (10 extra AA). Protein identity confirmed by LC-MS/MS.

Introduction to the Molecule

Irisin is a recently described exercise-induced hormone secreted by skeletal muscle in mice and humans. Irisin activates beige fat cells (beige cells have a gene expression pattern distinct from either white or brown fat and are preferentially sensitive to the polypeptide hormone Irisin). Irisin is cleaved from the type I membrane protein FNDC5 and improves systemic metabolism by increasing energy expenditure. Circulating irisin levels were shown to be upregulated after acute exercise. Increase of irisin under conditions of obesity may indicate a physiological function to improve glucose tolerance.

Research topic

Energy metabolism and body weight regulation

Amino Acid Sequence

MKHHHHHHAS DSPSAPVNVT VRHLKANSAV VSWDVLEDEV VIGFAISQQK KDVRMLRFIQ EVNTTTRSCA LWDLEEDTEY IVHVQAISIQ GQSPASEPVL FKTPREAEKM ASKNKDEVTM KE

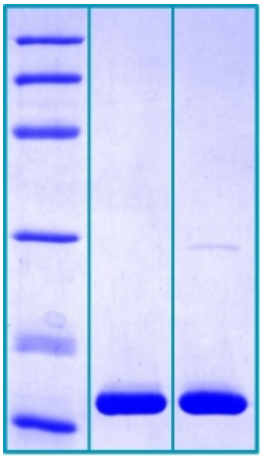
Source

E. coli

Purity

Purity as determined by densitometric image analysis: > 95%

SDS-PAGE gel



14 % SDS-PAGE separation of Human Irisin:

1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa

2. reduced and boiled sample, 2.5 µg/lane

3. non-reduced and non-boiled sample, 2.5 µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/mL solution in phosphate buffered saline.

Reconstitution

Add 200 µl of deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store the lyophilized protein at -80 °C. Lyophilized protein remains stable until the expiry date when stored at -80 °C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80 °C for long term storage. Reconstituted protein can be stored at 4 °C for a week.

Quality Control Test

BCA to determine quantity of the protein.
SDS-PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com