Epidermal Fatty Acid Binding Protein Human E. coli Tag free

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: FABP5, Fatty acid-binding protein epidermal, Epidermal-type fatty acid-binding protein, E-FABP, Fatty acid-binding protein 5, Psoriasis-associated fatty acid-binding protein homolog, PA-FABP

Cat. No.:
RD172060100 (0.1 mg)

Description

Total 135 AA. MW: 15.2 kDa (calculated). UniProtKB acc.no. Q01469. 134 AA and one extra AA, N-terminal methionin (highlighted).

Introduction to the Molecule

Human fatty acid binding protein EFABP is a 15 kD member of the intracellular fatty acid binding protein (FABP) family, which is known for the ability to bind fatty acids and related compounds (bile acids or retinoids). in an internal cavity. The fatty acid binding proteins aP2 (fatty acid binding protein [FABP]-4) and mal1 (EFABP) are closely related and both are expressed in adipocytes. Absence of EFABP/mal1 resulted in increased systemic insulin sensitivity in two models of obesity and insulin resistance. Adipocytes isolated from mal1-deficient mice also exhibited enhanced insulin-stimulated glucose transport capacity. In contrast, mice expressing high levels of mal1 in adipose tissue display reduced systemic insulin sensitivity .

Research topic

Cardiovascular disease, Diabetology - Other Relevant Products, Energy metabolism and body weight regulation

Amino Acid Sequence

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MATVQQLEGR WRLVDSKGFD EYMKELGVGI ALRKMGAMAK PDCIITCDGK NLTIKTESTL KTTQFSCTLG EKFEETTADG
RKTQTVCNFT DGALVQHQEW DGKESTITRK LKDGKLVVEC VMNNVTCTRI YEKVE
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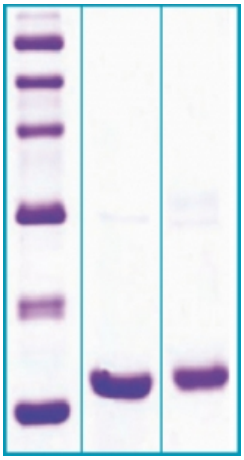
Source

E. coli

Purity

Purity as determined by densitometric image analysis: > 90%

SDS-PAGE gel



14% SDS-PAGE separation of Human EFABP
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 5µg/lane
3. non-reduced and non-heated sample, 5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

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

Reconstitution

Add 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 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.

References to this Product

- Stejskal D, Karpisek M . *Adipocyte fatty acid binding protein in a Caucasian population: a new marker of metabolic syndrome?*. Eur J Clin Invest . Sep;36(9):621-5 (2006)
- Yeung DC, Wang Y, Xu A, Cheung SC, Wat NM, Fong DY, Fong CH, Chau MT, Sham PC, Lam KS. *Epidermal fatty-acid-binding protein: a new circulating biomarker associated with cardio-metabolic risk factors and carotid atherosclerosis.* Eur Heart J. 2008 Sep;29 (17):2156-63
- Haider DG, Schindler K, Bohdjalian A, Prager G, Luger A, Wolzt M, Ludvik B . *Plasma adipocyte and epidermal fatty acid binding protein is reduced after weight loss in obesity.* Diabetes Obes Metab . Mar 13 (2007)
- Housova J, Anderlova K, Krizova J, Haluzikova D, Kremen J, Kumstyrova T, Papezova H, Haluzik M . *Serum adiponectin and resistin concentrations in patients with restrictive and binge/purge form of anorexia nervosa and buliminia nervosa.* J Clin Endocrinol Metab . Dec 14 (2004) [Epub ahead of print]

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