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Recombinant Human FABP3/H-FABP Protein

Catalog No.: RP00502 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 2170 P05413

Tags

N-His

Synonyms

FABP3; FABP11; MDGI; Fatty acid-binding protein; heart; Fatty acid-binding protein 3; Heart-type fatty acid-binding protein; H-FABP; Mammary-derived growth inhibitor; MDGI; Muscle fatty acid-binding protein; M-FABP

Product Information

Source Purification

HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

15.57 kDa 15-20 kDa

Endotoxin

 $< 0.01 \; \text{EU/}\mu\text{g}$ of the protein by LAL method

Formulation

Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

a 400-999-6126

Background

FABP3/H-FABP, FABPs are thought to play a role in the intracellular transport of long-chain fatty acids and their acyl-CoA esters. Fatty acid binding protein-3 is a member of a large superfamily of lipid binding proteins that are expressed in a tissue specific manner . Although all are highly conserved in their tertiary structure, there is only modest aa identity between any two members. The FABP family members are subdivided based on organ or tissue type it was originally expressed or identified; liver- (L-FABP), intestine- (I-FABP), heart- (H-FABP), adipocyte- (A-FABP), epidermal- (E-FABP), ileal- (IL-FABP), brain- (B-FABP), myelin- (M-FABP) and testis-FABP (T-FABP). Human H-FABP, the product of the FABP3 gene, is a 132 aa cytosolic protein that shows a flattened beta -barrel structure generated by a series of antiparallel beta -strands and two alpha -helices . One molecule of FABP3 is capable of binding one long-chain fatty acid . It is suggested that ligands first bind to the outside of the molecule, and this binding subsequently induces a conformational change in the binding protein, resulting in "internalization" of the ligand . Human FABP3 is 86%, 89% and 89% aa identical to mouse, rat and canine FABP3, respectively.

Basic Information

Description

Recombinant Recombinant Human FABP3/H-FABP Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val2-Ala133) of Human FABP3/H-FABP (Accession #NP_004093.1) fused with a His tag at the N-terminus.

Bio-Activity

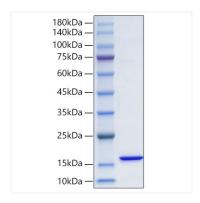
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human FABP3/H-FABP Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.