Human FABP2 / I-FABP Protein (His Tag)

Catalog Number: **10130-H08E**

General Information

Gene Name Synonym:

FABPI; I-FABP; MGC133132

Protein Construction:

A DNA sequence encoding the human FABP2 (P12104-1) (Met 1-Asp 132) was expressed, with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met 1

Molecular Mass:

The recombinant human FABP2 comprises 142 amino acids and has a predicted molecular mass of 16.6 kDa. It migrates as an approximately 17 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

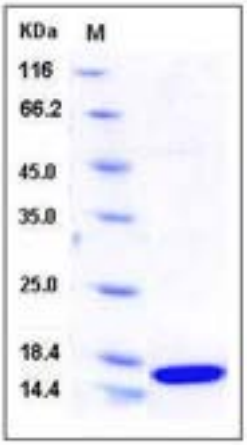
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Fatty acid binding protein (FABP) is one of the intracellular proteins, with a low molecular weight of approximately 15 kDa, that plays important roles in the transportation and metabolism of long-chain fatty acids. FABP family proteins could be used as tissue specific injury marker based on the following characteristics of FABP. The intestinal fatty acid binding protein (I-FABP), or fatty acid-binding protein 2 (FABP2), an intracellular protein expressed only in the intestine, involved in the absorption and intracellular transport of dietary long chain fatty acids. The FABP2 gene is proposed as a candidate gene for diabetes because the protein it codes is involved in fatty acid (FA) absorption and metabolism. Numerous studies have assessed FABP2 gene variants. A transition of G to A at codon 54 of FABP2 results in an amino acid substitution (Ala54 to Thr54), which is common in diverse populations and results in increased FA absorption in vivo. Some evidence indicates that this variant may be associated with type 2 diabetes. This polymorphism was associated with some cardiovascular risk factors. The cytosolic human intestinal fatty acid binding protein (hFABP2) is proposed to be involved in intestinal absorption of long-chain fatty acids. FABP2 may also help maintain energy homeostasis by functioning as a lipid sensor.

References