

I-FABP Monoclonal Antibody

Catalog No: YM0352

Reactivity: Human

Applications: WB;IHC;IF;FCM;ELISA

Target: I-FABP

Fields: >>PPAR signaling pathway;>>Fat digestion and absorption

Gene Name: FABP2

Protein Name: Fatty acid-binding protein, intestinal

P12104

P55050

Human Gene Id: 2169

Human Swiss Prot

ilulliali Swiss Filo

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of human I-FABP expressed in E. Coli.

Specificity: I-FABP Monoclonal Antibody detects endogenous levels of I-FABP protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution : WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

Purification: Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 15kD

Cell Pathway: PPAR;

P References: 1. Yamada, K. et al. (1997) Diabetologia. 40(6):706-10

2. Georgopoulos, A. et al. (2000)85(9):3155-60

3. Kim, CH. et al. (2001) Metabolism. 50(4):473-6

4. Fisher, E. et al. (2006) Horm Met

Background:

The intracellular fatty acid-binding proteins (FABPs) belong to a multigene family with nearly twenty identified members. FABPs are divided into at least three distinct types, namely the hepatic-, intestinal- and cardiac-type. They form 14-15 kDa proteins and are thought to participate in the uptake, intracellular metabolism and/or transport of long-chain fatty acids. They may also be responsible in the modulation of cell growth and proliferation. Intestinal fatty acid-binding protein 2 gene contains four exons and is an abundant cytosolic protein in small intestine epithelial cells. This gene has a polymorphism at codon 54 that identified an alanine-encoding allele and a threonine-encoding allele. Thr-54 protein is associated with increased fat oxidation and insulin resistance. [provided by RefSeq, Jul 2008],

Function:

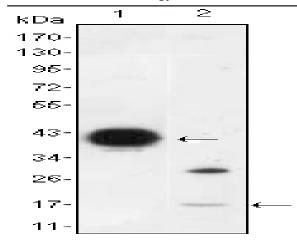
domain:Forms a beta-barrel structure that accommodates the hydrophobic ligand in its interior.,function:FABP are thought to play a role in the intracellular transport of long-chain fatty acids and their acyl-CoA esters. FABP2 is probably involved in triglyceride-rich lipoprotein synthesis. Binds saturated long-chain fatty acids with a high affinity, but binds with a lower affinity to unsaturated long-chain fatty acids. FABP2 may also help maintain energy homeostasis by functioning as a lipid sensor.,induction:By EGF.,similarity:Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.,tissue specificity:Expressed in the small intestine and at much lower levels in the large intestine. Highest expression levels in the jejunum.,

Subcellular Location : Cytoplasm.

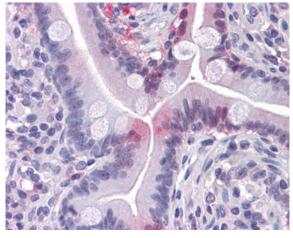
Expression:

Expressed in the small intestine and at much lower levels in the large intestine. Highest expression levels in the jejunum.

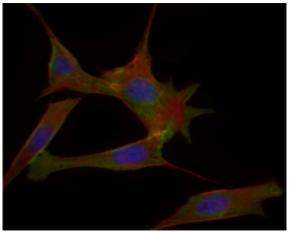
Products Images



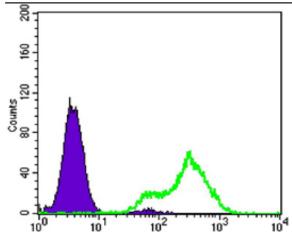
Western Blot analysis using I-FABP Monoclonal Antibody against FABP2-hlgGFc transfected HEK293 (1) cell lysate and LOVO (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Small Intestine tissues with AEC staining using I-FABP Monoclonal Antibody.



Immunofluorescence analysis of 3T3-L1 cells using I-FABP Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of LOVO cells using I-FABP Monoclonal Antibody (green) and negative control (purple).