

FABP2 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1341a

Product Information

Application WB, IHC, FC, ICC, E

Primary Accession
Reactivity
Human
Host
Clonality
Monoclonal
Clone Names
Isotype
IgG1
Calculated MW
P12104
Human
House
Human
House
Monoclonal
15237

Description 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. Genetic variation in FABP2 may thus contribute to interindividual variation in the response of plasma lipoproteins

to different dietary fibres, but the mechanism does not appear to be related to increases in fecal bile acid secretion.

Immunogen Purified recombinant fragment of human FABP2 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID 2169

Other Names Fatty acid-binding protein, intestinal, Fatty acid-binding protein 2,

Intestinal-type fatty acid-binding protein, I-FABP, FABP2, FABPI

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A

E~~N/A

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FABP2 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name FABP2

Synonyms FABPI

Function FABPs 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.

Cellular Location Cytoplasm.

Tissue Location Expressed in the small intestine and at much lower levels in the large

intestine. Highest expression levels in the jejunum.

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 Metab Res. 38(5):341-5

Images

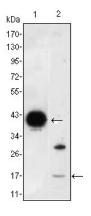


Figure 1: Western blot analysis using FABP2 mouse mAb against FABP2-hIgGFc transfected HEK293 (1) cell lysate and LOVO (2) cell lysate.

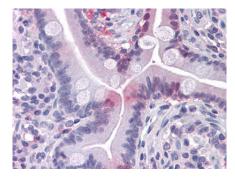
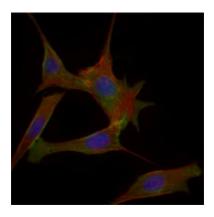


Figure 2: Immunohistochemical analysis of paraffin-embedded human Small Intestine tissues using FABP2 mouse mAb

Figure 3: Immunofluorescence analysis of 3T3-L1 cells using FABP2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



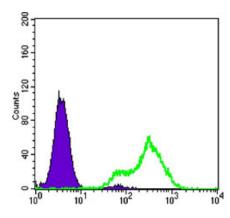


Figure 3: Flow cytometric analysis of LOVO cells using FABP2 mouse mAb (green) and negative control (purple).

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