

FABP2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1341a**Specification**

FABP2 Antibody - Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P12104
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	15kDa KDa

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.

FABP2 Antibody - 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.

FABP2 Antibody - 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.

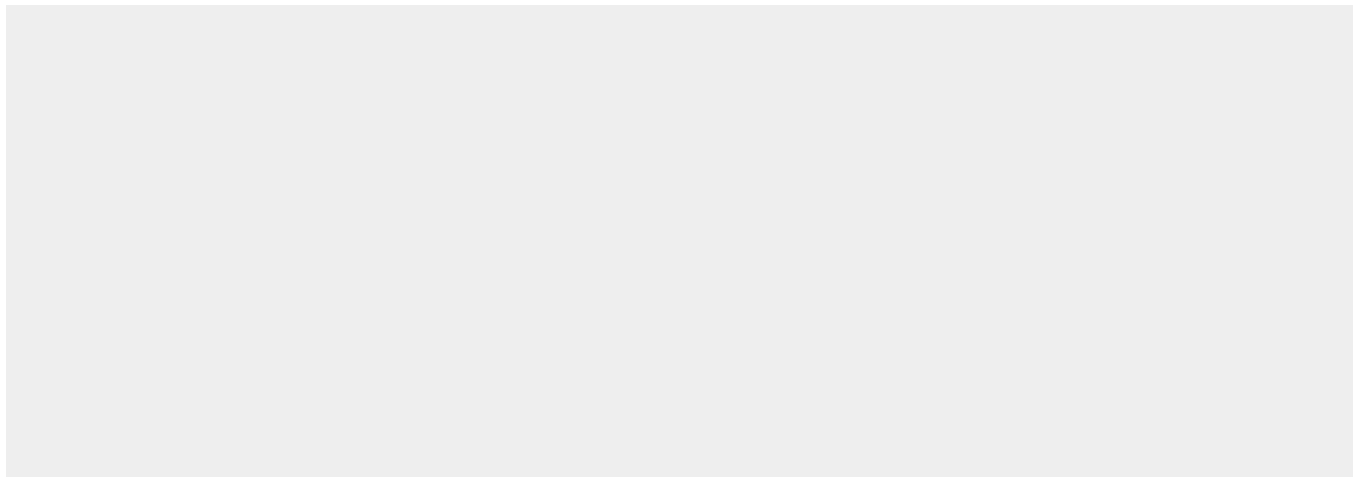
Tissue Location

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

FABP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FABP2 Antibody - Images

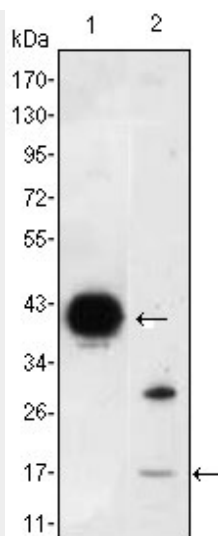


Figure 1: Western blot analysis using FABP2 mouse mAb against FABP2-hlgGfc transfected HEK293 (1) cell lysate and LOVO (2) cell lysate.

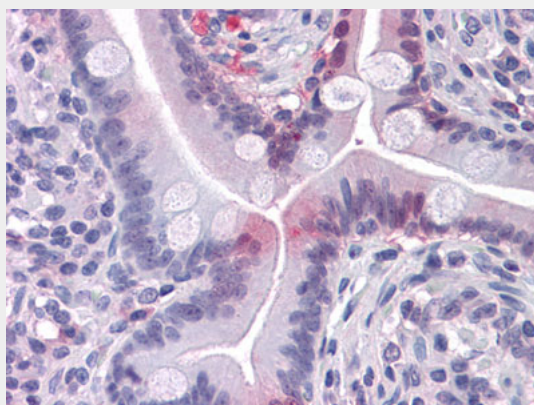


Figure 2: Immunohistochemical analysis of paraffin-embedded human Small Intestine tissues using FABP2 mouse mAb

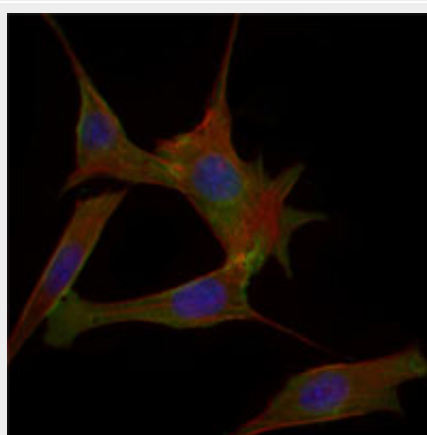


Figure 3: Immunofluorescence analysis of 3T3-L1 cells using FABP2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

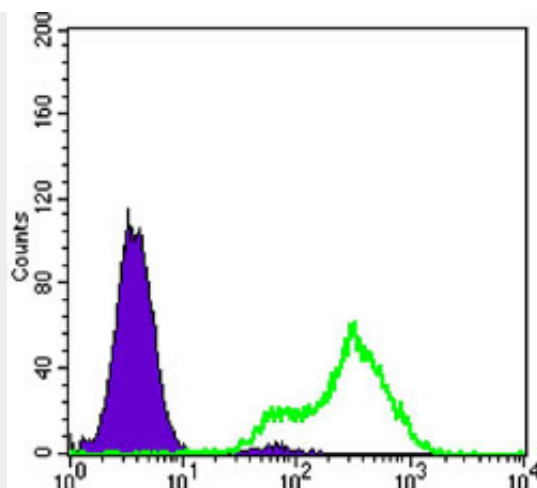


Figure 3: Flow cytometric analysis of LOVO cells using FABP2 mouse mAb (green) and negative control (purple).

FABP2 Antibody - 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