

FABP2 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1341a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P12104
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	9A9B7B3
Isotype	IgG1
Calculated MW	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

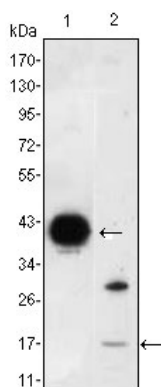


Figure 1: Western blot analysis using FABP2 mouse mAb against FABP2-hIgGfc transfected HEK293 (1) cell lysate and LOVO (2) cell lysate.

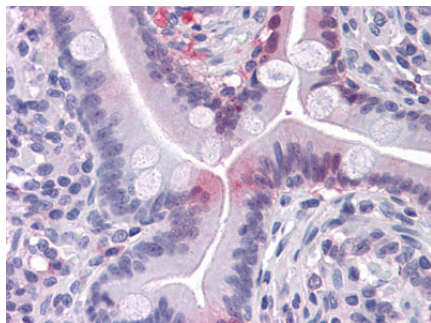


Figure 2: Immunohistochemical analysis of paraffin-embedded human Small Intestine tissues using FABP2 mouse mAb

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.

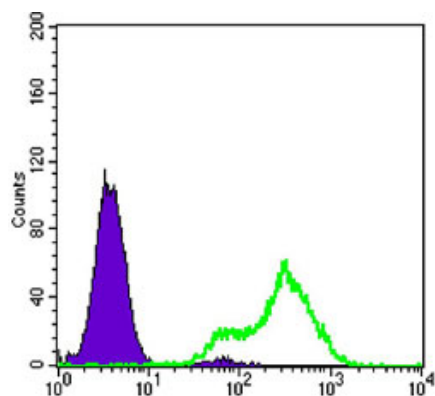
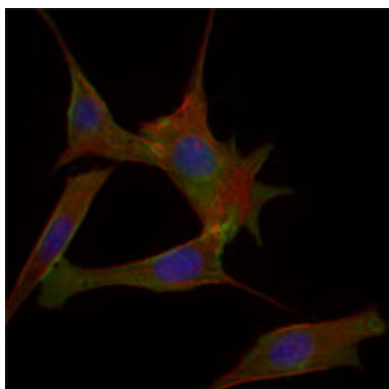


Figure 3: Flow cytometric analysis of LOVO cells using FABP2 mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.