

Anti-FABP2/I-FABP Picoband Antibody

Catalog # ABO10245

Product Information

Application	WB, IHC-P
Primary Accession	P55050
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Fatty acid-binding protein, intestinal(Fabp2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	14079
Other Names	Fatty acid-binding protein, intestinal, Fatty acid-binding protein 2, Intestinal-type fatty acid-binding protein, I-FABP, Fabp2, Fabpi
Calculated MW	15126
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm.
Tissue Specificity	Expressed in the small intestine. Highest expression levels in the proximal ileum. .
Source	Eukaryota
Protein Name	Fatty acid-binding protein, intestinal
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	E.coli-derived mouse FABP2/I-FABP recombinant protein (Position: A2-E132). Mouse FABP2/I-FABP shares 77.9% and 92.4% amino acid (aa) sequence identity with human and rat FABP2/I-FABP, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
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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. Highest expression levels in the proximal ileum.

Background

FABP 2, Fatty acid-binding protein 2, is a protein that in humans is encoded by the FABP2 gene. Using a human cDNA probe, the gene is assigned to chromosome 4 in somatic cell hybrids. FABP 2 gene contains four exons and is an abundant cytosolic protein in small intestine epithelial cells. The FABPs belong to a multigene family with nearly twenty identified members. And 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. Also, they may be responsible in the modulation of cell growth and proliferation.

Images

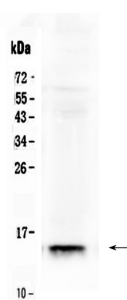


Figure 1. Western blot analysis of FABP2/I-FABP using anti- FABP2/I-FABP antibody (ABO10245). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse small intestine tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- FABP2/I-FABP antigen affinity purified polyclonal antibody (Catalog # ABO10245) at 0.5 µg/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for FABP2/I-FABP at approximately 15KD. The expected band size for FABP2/I-FABP is at 15KD.

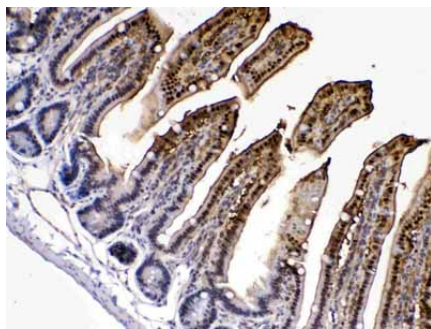


Figure 2. IHC analysis of FABP2/I-FABP using anti-FABP2/I-FABP antibody (ABO10245). FABP2/I-FABP was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

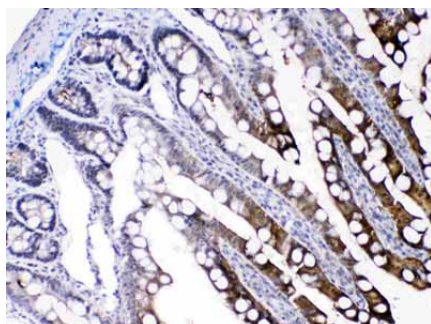


Figure 3. IHC analysis of FABP2/I-FABP using anti-FABP2/I-FABP antibody (ABO10245). FABP2/I-FABP was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

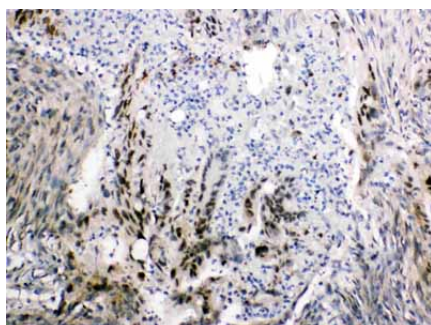


Figure 4. IHC analysis of FABP2/I-FABP using anti-FABP2/I-FABP antibody (ABO10245). FABP2/I-FABP was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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