

Anti-FABP2/I-FABP Picoband Antibody

Catalog # ABO10245

Specification

Anti-FABP2/I-FABP Picoband Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP55050HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Fatty acid-binding protein, intestinal(Fabp2) detection. Testedwith WB, IHC-P in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-FABP2/I-FABP Picoband Antibody - 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 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

 Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization Cytoplasm.

Tissue Specificity Expressed in the small intestine. Highest expression levels in the proximal ileum. .

Protein Name Fatty acid-binding protein, intestinal

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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.

Anti-FABP2/I-FABP Picoband 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. Highest expression levels in the proximal ileum.

Anti-FABP2/I-FABP Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-FABP2/I-FABP Picoband Antibody - 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 $\hat{1}$ /4g/mL overnight at 4ŰC, 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.



analysis FABP2/I-FABP using anti-FABP2/I-FABP Figure 2. IHC of 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 11¼g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.





analysis of FABP2/I-FABP Figure 3. IHC 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 11¹/₄g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



FABP2/I-FABP Figure 4. IHC analysis of usina 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 $1^{1}/_{4}$ g/ml rabbit anti- FABP2/I-FABP Antibody (ABO10245) overnight at $4\hat{A}^{\circ}C$. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-FABP2/I-FABP Picoband Antibody - 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.