

## Goat Anti-FABP2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1392a

### Specification

# **Goat Anti-FABP2 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>P12104</u> <u>NP\_000125</u>, <u>2169</u>, <u>14079 (mouse)</u> Human Mouse, Rat, Pig, Dog Goat Polyclonal 100ug/200ul IgG 15237

### **Goat Anti-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~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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

Goat Anti-FABP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-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.

### **Goat Anti-FABP2 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>

Goat Anti-FABP2 Antibody - Images



AF1392a (0.001  $\mu$ g/ml) staining of Human Duodenum lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





HEK293 overexpressing FABP2 (RC210206) and probed with AF1392a (mock transfection in first lane), tested by Origene.



AF1392a (2.5  $\mu$ g/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB07742 (2.5µg/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.





EB07742 (0.001µg/ml) staining of Human Duodenum (A) and (0.003ug/ml) lleum (B) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07742 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

# Goat Anti-FABP2 Antibody - Background

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.

# **Goat Anti-FABP2 Antibody - References**



Metabolic syndrome and ALA54THR polymorphism of fatty acid-binding protein 2 in obese patients. de Luis DA, et al. Metabolism, 2010 Aug 17. PMID 20723947.

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Meta-analysis on the effect of the Ala54Thr polymorphism of the fatty acid-binding protein 2 gene on body mass index. Zhao T, et al. Nutr Metab Cardiovasc Dis, 2010 Jun 19. PMID 20621703. Association of the fatty acid-binding protein 2 gene Ala54Thr polymorphism with insulin resistance and blood glucose: a meta-analysis in 13451 subjects. Zhao T, et al. Diabetes Metab Res Rev, 2010 Jul. PMID 20578207.