

# Anti-Fatty Acid Binding Protein 5 Antibody

Catalog # ABO10794

#### Specification

## Anti-Fatty Acid Binding Protein 5 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionQ01469HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Fatty acid-binding protein, epidermal(FABP5) detection. Testedwith WB, IHC-P in Human.

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

## Anti-Fatty Acid Binding Protein 5 Antibody - Additional Information

Gene ID 2171

**Other Names** Fatty acid-binding protein, epidermal, Epidermal-type fatty acid-binding protein, E-FABP, Fatty acid-binding protein 5, Psoriasis-associated fatty acid-binding protein homolog, PA-FABP, FABP5

Calculated MW 15164 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat<br>Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Cytoplasm.

**Tissue Specificity** Keratinocytes; highly expressed in psoriatic skin.

**Protein Name** Fatty acid-binding protein, epidermal

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Fatty Acid Binding Protein 5(2-16aa ATVQQLEGRWRLVDS).



**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-Fatty Acid Binding Protein 5 Antibody - Protein Information

Name FABP5 (HGNC:3560)

#### Function

Intracellular carrier for long-chain fatty acids and related active lipids, such as endocannabinoids, that regulate the metabolism and actions of the ligands they bind. In addition to the cytosolic transport, selectively delivers specific fatty acids from the cytosol to the nucleus, wherein they activate nuclear receptors (PubMed:<a href="http://www.uniprot.org/citations/21395585" target="\_blank">21395585</a>, PubMed:<a href="http://www.uniprot.org/citations/21395585" target="\_blank">21395585</a>). Delivers retinoic acid to the nuclear receptor peroxisome proliferator-activated receptor delta; which promotes proliferation and survival. May also serve as a synaptic carrier of endocannabinoid at central synapses and thus controls retrograde endocannabinoid signaling. Modulates inflammation by regulating PTGES induction via NF-kappa-B activation, and prostaglandin E2 (PGE2) biosynthesis during inflammation (By similarity). May be involved in keratinocyte differentiation (PubMed:<a

href="http://www.uniprot.org/citations/8092987" target="\_blank">8092987</a>).

#### **Cellular Location**

Cytoplasm. Nucleus Synapse {ECO:0000250|UniProtKB:Q05816}. Postsynaptic density {ECO:0000250|UniProtKB:Q05816}. Secreted {ECO:0000250|UniProtKB:Q05816}. Note=Localizes primarily to the cytoplasm. Upon certain ligand binding, a conformation change exposes a nuclear localization motif and the protein is transported into nucleus (PubMed:24692551). Secreted by astrocytes, but not by neurons (By similarity). {ECO:0000250|UniProtKB:Q05816, ECO:0000269|PubMed:24692551}

#### **Tissue Location**

Keratinocytes; highly expressed in psoriatic skin (PubMed:8092987). Expressed in brain gray matter (PubMed:21395585)

#### Anti-Fatty Acid Binding Protein 5 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-Fatty Acid Binding Protein 5 Antibody - Images



Anti- Fatty Acid Binding Protein 5 antibody, ABO10794, Western blottingAll lanes: Anti Fatty Acid Binding Protein 5 (ABO10794) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 15KDObserved bind size: 15KD



Anti- Fatty Acid Binding Protein 5 antibody, ABO10794, IHC(P)IHC(P): Human Intestinal Cancer Tissue

## Anti-Fatty Acid Binding Protein 5 Antibody - Background

FABP5, Fatty acid-binding protein, epidermal, is a protein that in humans is encoded by the FABP5 gene. This gene encodes the fatty acid binding protein found in epidermal cells, and was first identified as being upregulated in psoriasis tissue. It is mapped to 8q21.13. Fatty acid binding proteins are a family of small, highly conserved, cytoplasmic proteins that bind long-chain fatty acids and other hydrophobic ligands. It is though that FABPs roles include fatty acid uptake, transport, and metabolism.