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Anti-Fatty Acid Binding Protein 5 Antibody

Catalog # ABO11161

Product Information

Application	WB, IHC-P
Primary Accession	Q05816
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Fatty acid-binding protein, epidermal(FABP5) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	16592
Other Names	Fatty acid-binding protein, epidermal, Epidermal-type fatty acid-binding protein, E-FABP, Fatty acid-binding protein 5, Keratinocyte lipid-binding protein, Psoriasis-associated fatty acid-binding protein homolog, PA-FABP, Fabp5, Fabpe, Klbp, Mal1
Calculated MW	15137
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Mouse, Rat
Subcellular Localization	Cytoplasm.
Tissue Specificity	Most abundant in keratinocytes and also in stratified epithelia of epidermis and tongue. Relatively high levels found in adipose and mammary tissues and small amounts found in heart, brain, liver, spleen, muscle and lung.
Source	Eukaryota
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 mouse Fatty Acid Binding Protein 5(10-23aa KWRLMESHGFEEYM), different from the related rat sequence by two amino acids.

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.

Protein Information

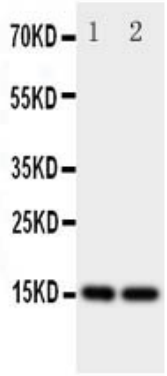
Name	Fabp5 {ECO:0000312|MGI:MGI:101790}
Function	Intracellular carrier for long-chain fatty acids and related active lipids, such as endocannabinoids, that regulate the metabolism and actions of the ligands they bind (PubMed:12540600, PubMed:8608126). In addition to the cytosolic transport, selectively delivers specific fatty acids from the cytosol to the nucleus, wherein they activate nuclear receptors (By similarity). Delivers retinoic acid to the nuclear receptor peroxisome proliferator-activated receptor delta; which promotes proliferation and survival (PubMed:17512406). May also serve as a synaptic carrier of endocannabinoid at central synapses and thus controls retrograde endocannabinoid signaling (PubMed:29531087). Modulates inflammation by regulating PTGES induction via NF-kappa-B activation, and prostaglandin E2 (PGE2) biosynthesis during inflammation (PubMed:29440395). May be involved in keratinocyte differentiation (By similarity).
Cellular Location	Cytoplasm. Nucleus Synapse. Postsynaptic density. Secreted 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 (By similarity). Secreted by astrocytes, but not by neurons (PubMed:29531087) {ECO:0000250|UniProtKB:Q01469, ECO:0000269|PubMed:29531087}
Tissue Location	Widely expressed..

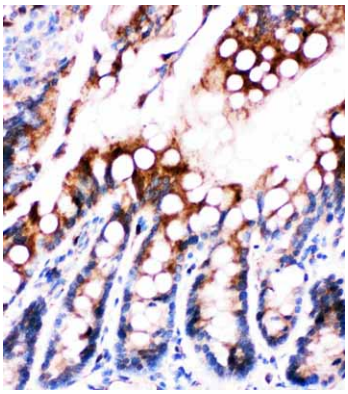
Background

FABP5(fatty acid binding protein 5(psoriasis-associated)) is a protein that in humans is encoded by the FABP5 gene, also known as PAFABP, EFABP, E-FABP, KFABP, PA-FABP, Epidermal-type fatty acid-binding protein, Fatty acid-binding protein 5, Psoriasis-associated fatty acid-binding protein homolog. It is a family of small, highly conserved, cytoplasmic proteins that bind long-chain fatty acids and other hydrophobic ligands. The PAFABP cDNA encodes a 135-amino acid protein with molecular weight 15,164. This gene encodes the fatty acid binding protein found in epidermal cells, and was first identified as being upregulated in psoriasis tissue. It is though that FABPs roles include fatty acid uptake, transport, and metabolism. Kaczocha et al.(2009) identified FABP5 and FABP7 as cytosolic proteins that transport AEA from the plasma membrane to subcellular fatty acid amide hydrolase, where it is hydrolyzed and inactivated. FABP3 did not show this specific transport function.

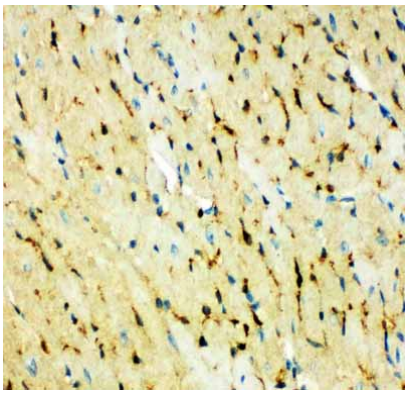
Images

Anti-Fatty Acid Binding Protein 5 antibody, ABO11161, Western blottingAll lanes: Anti Fatty Acid Binding Protein 5 (ABO11161) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Kidney Tissue Lysate at 50ugPredicted bind size: 15KDObserved bind size: 15KD





Anti-Fatty Acid Binding Protein 5 antibody, ABO11161, IHC(P)IHC(P): Rat Intestine Tissue



Anti-Fatty Acid Binding Protein 5 antibody, ABO11161, IHC(P)IHC(P): Mouse Cardiac Muscle

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