Datasheet for ABIN5518913

anti-FABP4 antibody (AA 2-132)

1 Image

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Overview

Quantity:	100 µg
Target:	FABP4
Binding Specificity:	AA 2-132
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This FABP4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-FABP4 Antibody Picoband®
Immunogen:	E. coli-derived rat FABP4 recombinant protein (Position: C2-A132). Rat FABP4 shares 88.5% and 93.9% amino acid (aa) sequence identity with human and mouse FABP4, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-FABP4 Antibody Picoband® (ABIN5518913). Tested in ELISA, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	FABP4
Alternative Name:	Fabp4 (FABP4 Products)
Background:	Synonyms: Fatty acid-binding protein, adipocyte,Adipocyte lipid-binding protein,ALBP,Adipocyte-type fatty acid-binding protein,A-FABP,AFABP,Fatty acid-binding protein 4,Fabp4, Tissue Specificity: Expressed in the endothelium of the choriocapillaris in eyes (at protein level). Not expressed in the retinal epithelium at detectable levels. . Background: Fatty acid binding proteins (FABPs) are small cytoplasmic proteins that are expressed in a highly tissue-specific manner and bind to fatty acids such as oleic and retinoic acid. Adipocyte fatty-acid-binding protein, aP2 (FABP4) is expressed in adipocytes and macrophages, and integrates inflammatory and metabolic responses. Studies in aP2-deficient mice have shown that this lipid chaperone has a significant role in several aspects of metabolic syndrome, including type 2 diabetes and atherosclerosis. It regulates allergic airway inflammation and may provide a link between fatty acid metabolism and asthma.
Molecular Weight:	15 kDa
Gene ID:	79451
UniProt:	P70623
Pathways:	Brown Fat Cell Differentiation

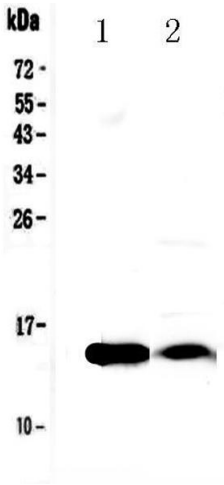
Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL, Mouse, Rat ELISA, 0.1-0.5 µg/mL, 1. Hotamisligil, G. S., Johnson, R. S., Distel, R. J., Ellis, R., Papaioannou, V. E., Spiegelman, B. M. : Uncoupling of obesity from insulin resistance through a targeted mutation in aP2, the adipocyte fatty acid binding protein. Science 274: 1377-1379, 1996. 2. Furuhashi, M., Tuncman, G., Gorgun, C. Z., Makowski, L., Atsumi, G., Vaillancourt, E., Kono, K., Babaev, V. R., Fazio, S., Linton, M. F., Sulsky, R., Robl, J. A., Parker, R. A., Hotamisligil, G. S. : Treatment of diabetes and atherosclerosis by inhibiting fatty-acid-binding protein aP2. Nature 447: 959-965, 2007. 3. Shum, B. O. V., Mackay, C. R., Gorgun, C. Z., Frost, M. J., Kumar, R. K., Hotamisligil, G. S., Rolph, M. S. : The adipocyte fatty acid-binding protein aP2 is required in allergic airway inflammation. J. Clin. Invest. 116: 2183-2192, 2006.
Comment:	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of FABP4 using anti-FABP4 antibody . 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: rat cardiac muscle tissue lysate, Lane 2: mouse cardiac muscle tissue lysate. 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-FABP4 antigen affinity purified polyclonal antibody (Catalog #) 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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for FABP4 at approximately 15KD. The expected

band size for FABP4 is at 15KD.