PRODUCT INFORMATION

Catalog number AFA0908

Clone No. 2G4

Product type Monoclonal Antibody

UnitProt No. P07148

NCBI Accession No. NP_001434

Alternative Names

Fatty acid binding protein 1, Fatty acid-binding protein, liver, FABPL, L-FABP, FABP1, Fatty acid binding protein 1, fatty acid binding protein 1 liver

PRODUCT SPECIFICATION

Antibody Host Mouse

Reacts With

Human

Concentration 1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human FABP1 (1-127aa) purified from E. coli

Isotype

lgG1 kappa

Purification Note By protein-G affinity chromatography

Application

ELISA, WB, ICC/IF, IHC, FACS

Usage

The antibody has been tested by ELISA, Western blot, ICC/IF, FACS and IHC analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.



Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

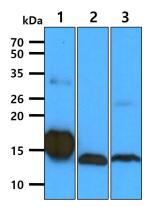
FABP1 (Fatty acid binding protein1) encodes the fatty acid binding protein found in liver. FABP1 is composed of ten antiparallelbeta strands that form a barrel with a bigger binding pocket than the other FABPs allowing it to accommodate two fatty acid. This protein binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm; it may be involved in intracellular lipid transport and metabolism.

General References

Atshaves BP, et al: (2004) Mol Cell Biochem. 259(1-2), 115-29. Nakamura T, et al: (2005) Diabestes Care. 28(11), 2728-32.

DATA

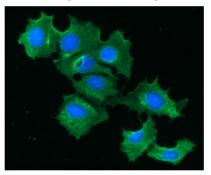
Western blot analysis (WB)



The Recombinant protein (50ng) and Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human FABP1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: FABP1 Recombinant protein

- Lane 2.: HepG2 cell lysate
- Lane 3.: Liver tissues lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)

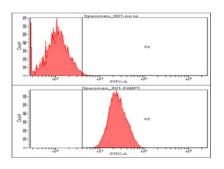


ICC/IF analysis of FABP1 in Hep3B cells. The cell was stained with AFA0908 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

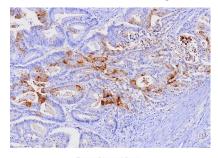
Flow cytometry (FACS)

2





Immunohistochemistry (IHC)



Flow cytometry analysis of FABP1 in Hep3B cell line, staining at 2-5ug for 1x10^6cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.

Paraffin embedded sections of human colon cancer tissue were incubated with anti-human FABP1 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)