

B-FABP (G-13): sc-16056

BACKGROUND

Fatty acid-binding proteins, designated FABPs, are a family of homologous, cytoplasmic proteins that are expressed in a highly tissue-specific manner and play an integral role in the balance between lipid and carbohydrate metabolism. FABPs mediate fatty acid (FA) and/or hydrophobic ligand uptake, transport and targeting within their respective tissues. The mechanisms underlying these actions can give rise to both passive diffusional uptake and protein-mediated transmembrane transport of FAs. Brain fatty acid-binding protein (B-FABP) is expressed in the radial glial cells of the developing central nervous system as well as in a subset of human malignant glioma cell lines.

REFERENCES

1. Veerkamp, J.H. and Maatman, R.G. 1995. Cytoplasmic fatty acid-binding proteins: their structure and genes. *Prog. Lipid Res.* 34: 17-52.
2. Hotamisligil, G.S., et al. 1996. Uncoupling of obesity from insulin resistance through a targeted mutation in aP2, the adipocyte fatty acid binding protein. *Science* 274: 1377-1379.
3. Storch, J. and Thumser, A.E. 2000. The fatty acid transport function of fatty acid-binding proteins. *Biochim. Biophys. Acta* 1486: 28-44.

CHROMOSOMAL LOCATION

Genetic locus: FABP7 (human) mapping to 6q22.31; Fabp7 (mouse) mapping to 10 B4.

SOURCE

B-FABP (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of B-FABP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16056 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

B-FABP (G-13) is recommended for detection of B-FABP of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for B-FABP siRNA (h): sc-41235, B-FABP siRNA (m): sc-41236, B-FABP shRNA Plasmid (h): sc-41235-SH, B-FABP shRNA Plasmid (m): sc-41236-SH, B-FABP shRNA (h) Lentiviral Particles: sc-41235-V and B-FABP shRNA (m) Lentiviral Particles: sc-41236-V.

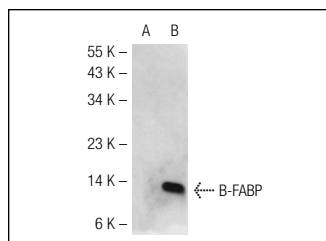
Molecular Weight of B-FABP: 14-15 kDa.

Positive Controls: B-FABP (h): 293T Lysate: sc-113817.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



B-FABP (G-13): sc-16056. Western blot analysis of B-FABP expression in non-transfected: sc-117752 (A) and human B-FABP transfected: sc-113817 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Seliger, B., et al. 2005. Identification of fatty acid binding proteins as markers associated with the initiation and/or progression of renal cell carcinoma. *Proteomics* 5: 2631-2640.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **B-FABP (F-6): sc-374588**, our highly recommended monoclonal alternative to B-FABP (G-13).