

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

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. Bisgrove, D.A., et al. 2000. Regulation of brain fatty acid-binding protein expression by differential phosphorylation of nuclear factor I in malignant glioma cell lines. *J. Biol. Chem.* 275: 30668-30676.
4. Storch, J. and Thumser, A.E. 2000. The fatty acid transport function of fatty acid-binding proteins. *Biochim. Biophys. Acta* 1486: 28-44.
5. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 600434. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Glatz, J.F. and Storch, J. 2001. Unravelling the significance of cellular fatty acid-binding proteins. *Curr. Opin. Lipidol.* 12: 267-274.
7. Veerkamp, J.H. and Zimmerman, A.W. 2001. Fatty acid-binding proteins of nervous tissue. *J. Mol. Neurosci.* 16: 133-142.
8. Barley, N.F., et al. 2003. Human ileal bile acid-binding protein promoter and the effects of CDX2. *Biochim. Biophys. Acta* 1630: 138-143.

CHROMOSOMAL LOCATION

Genetic locus: FABP7 (human) mapping to 6q22.31.

PRODUCT

B-FABP (h): 293T Lysate represents a lysate of human B-FABP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

B-FABP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive B-FABP antibodies. Recommended use: 10-20 µl per lane.

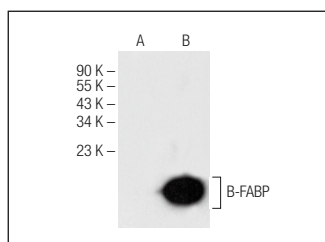
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

B-FABP (F-6): sc-374588 is recommended as a positive control antibody for Western Blot analysis of enhanced human B-FABP expression in B-FABP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



B-FABP (F-6): sc-374588. 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.

RESEARCH USE

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