

# L-FABP (N-20): sc-16064

## 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. FABPs are expressed in adipocytes (A-FABP), brain, (B-FABP), epithelium (E-FABP, psoriasis-associated FABP, PA-FABP), striated muscle and heart (H-FABP, mammary-derived growth inhibitor or MDGI), intestine (I-FABP), liver (L-FABP), myelin (M-FABP), and testis (T-FABP). Liver-specific FABP (L-FABP) expression is modulated by developmental, hormonal, dietary, and pharmacological factors and is required for cholesterol synthesis and metabolism.

## CHROMOSOMAL LOCATION

Genetic locus: FABP1 (human) mapping to 2p11.2; Fabp1 (mouse) mapping to 6 C1.

## SOURCE

L-FABP (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of L-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-16064 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

L-FABP (N-20) is recommended for detection of L-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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

L-FABP (N-20) is also recommended for detection of L-FABP in additional species, including canine and porcine.

Suitable for use as control antibody for L-FABP siRNA (h): sc-41243, L-FABP siRNA (m): sc-41244, L-FABP shRNA Plasmid (h): sc-41243-SH, L-FABP shRNA Plasmid (m): sc-41244-SH, L-FABP shRNA (h) Lentiviral Particles: sc-41243-V and L-FABP shRNA (m) Lentiviral Particles: sc-41244-V.

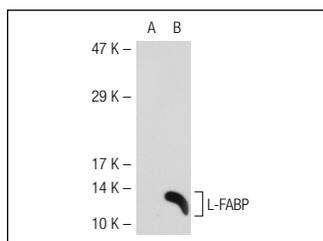
Molecular Weight of L-FABP: 14 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

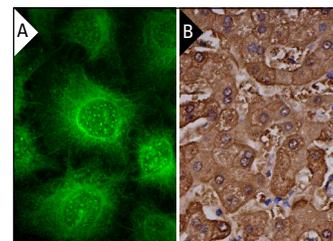
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



L-FABP (N-20): sc-16064. Western blot analysis of L-FABP expression in non-transfected: sc-117752 (A) and mouse L-FABP transfected: sc-121261 (B) 293T whole cell lysates.



L-FABP (N-20): sc-16064. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic and membrane staining of hepatocytes (B).

## SELECT PRODUCT CITATIONS

- Haigis, K., et al. 2006. The related retinoblastoma (pRb) and p130 proteins cooperate to regulate homeostasis in the intestinal epithelium. *J. Biol. Chem.* 281: 638-647.
- Goichon, A., et al. 2013. An enteral leucine supply modulates human duodenal mucosal proteome and decreases the expression of enzymes involved in fatty acid  $\beta$ -oxidation. *J. Proteomics* 78: 535-544.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **L-FABP (F-9): sc-271591** or **L-FABP (C-4): sc-374537**, our highly recommended monoclonal alternatives to L-FABP (N-20).