

A-FABP (T-15): sc-50537

BACKGROUND

Fatty acid-binding proteins, designated FABPs, are a family of homologous, 14-15 kDa 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). The human A-FABP gene is organized into 4 exons, maps to chromosome 8q21 and encodes a 132 amino acid protein. A-FABP protein comprises approximately 1% of the total cytosolic protein in human adipose tissue.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FABP4 (human) mapping to 8q21; Fabp4 (mouse) mapping to 3 A1.

SOURCE

A-FABP (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of A-FABP of human origin.

RESEARCH USE

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

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-50537 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

A-FABP (T-15) is recommended for detection of A-FABP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 A-FABP siRNA (h): sc-43592, A-FABP siRNA (m): sc-140595, A-FABP shRNA Plasmid (h): sc-43592-SH, A-FABP shRNA Plasmid (m): sc-140595-SH, A-FABP shRNA (h) Lentiviral Particles: sc-43592-V and A-FABP shRNA (m) Lentiviral Particles: sc-140595-V.

Molecular Weight of A-FABP: 15 kDa.

Positive Controls: mouse heart extract: sc-2254, rat heart extract: sc-2393 or rat skeletal muscle extract.

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) 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.

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 or our catalog for detailed protocols and support products.


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Try **A-FABP (B-4): sc-271529**, our highly recommended monoclonal alternative to A-FABP (T-15). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **A-FABP (B-4): sc-271529**.