

T-FABP (E-15): sc-54343

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). T-FABP, also known as PERF, FABP9 or PERF15, is expressed in testicular germ cells during spermatogenesis and may be involved in germ cell development.

REFERENCES

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4. Kido, T. and Namiki, H. 2000. Expression of testicular fatty acid-binding protein PERF 15 during germ cell apoptosis. *Dev. Growth Differ.* 42: 359-366.
5. Storch, J. and Thumser, A.E. 2000. The fatty acid transport function of fatty acid-binding proteins. *Biochim. Biophys. Acta* 1486: 28-44.
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7. Kido, T., et al. 2005. The testicular fatty acid binding protein PERF15 regulates the fate of germ cells in PERF15 transgenic mice. *Dev. Growth Differ.* 47: 15-24.
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CHROMOSOMAL LOCATION

Genetic locus: *Fabp9* (mouse) mapping to 3 A2.

SOURCE

T-FABP (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of T-FABP of mouse 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-54343 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

T-FABP (E-15) is recommended for detection of T-FABP of 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 T-FABP siRNA (m): sc-106979, T-FABP shRNA Plasmid (m): sc-106979-SH and T-FABP shRNA (m) Lentiviral Particles: sc-106979-V.

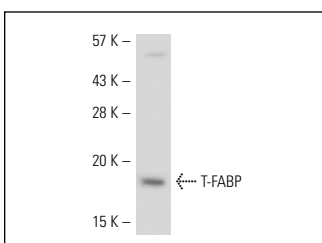
Molecular Weight of T-FABP: 15 kDa.

Positive Controls: rat testis extract: sc-2400.

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



T-FABP (E-15): sc-54343. Western blot analysis of T-FABP expression in rat testis tissue extract.

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.



Try **T-FABP (B-4): sc-390196** or **T-FABP (D-8): sc-390686**, our highly recommended monoclonal alternatives to T-FABP (E-15).