I-FABP (E-9): sc-374482

**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 hydrophilic 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), epididymis (E-FABP), also designated psoriasis-associated FABP or PA-FABP), muscle and heart (H-FABP, also designated mammary-derived growth inhibitor or MDGI), intestine (I-FABP), liver (L-FABP), myelin (M-FABP) and testis (T-FABP). Intestinal FABP (I-FABP) is an abundant cytosolic protein abundant in small intestine epithelial cells. The human gene maps to chromosome 4q26 and has a polymorphism at codon 54, which confers an alanine-encoding allele and a threonine-encoding allele. Threonine at position 54 is associated with increased fat oxidation and Insulin resistance.

**REFERENCES**

**CHROMOSOMAL LOCATION**
Genetic locus: FABP2 (human) mapping to 4q26; Fabp2 (mouse) mapping to 3 G1.

**SOURCE**
I-FABP (E-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 101-129 at the C-terminus of I-FABP of human origin.

**PRODUCT**
Each vial contains 200 µg IgG2b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Blocking peptide available for competition studies, sc-374482 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**
I-FABP (E-9) is recommended for detection of I-FABP of mouse, rat and human origin by Western blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-3 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).

**RECOMMENDED SUPPORT REAGENTS**
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-24941 or UltraCruz HRP Molecule Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 or 0.5 ml agarose/2.0 ml. 3) Immunofluorescence: use m-IgG HRP: sc-24982 or UltraCruz HRP Molecule Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 4) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 or 0.5 ml agarose/2.0 ml. 5) Immunohistochemistry: use m-IgG HRP: sc-24982 and Immunohistochemical: use sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**
I-FABP (E-9): sc-374482, Western blot analysis of I-FABP expression in non-transfected 293T sc-120931 (A) mouse I-FABP transfected 293T sc-120931 (B) and COLO 320DM (C) whole cell lysates.

**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.