

## FABP12 (D-14): sc-241409

### 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. FABP12 (fatty acid-binding protein 12) is a 132 amino acid protein that belongs to the calycin superfamily and fatty-acid binding protein family. Highly expressed in adult retina and testis, FABP12 may function in lipid transport. The gene encoding FABP12 maps to mouse chromosome 3 A1.

### REFERENCES

- Allen, G.W., et al. 2000. Depletion of a fatty acid-binding protein impairs neurite outgrowth in PC12 cells. *Brain Res. Mol. Brain Res.* 76: 315-324.
- Glatz, J.F., et al. 2001. Unravelling the significance of cellular fatty acid-binding proteins. *Curr. Opin. Lipidol.* 12: 267-274.
- Blackshaw, S., et al. 2004. Genomic analysis of mouse retinal development. *PLoS Biol.* 2: E247.
- Liu, R.Z., et al. 2008. A novel fatty acid-binding protein (FABP) gene resulting from tandem gene duplication in mammals: transcription in rat retina and testis. *Genomics* 92: 436-445.
- Toelle, A., et al. 2011. Fatty acid binding proteins (FABPs) in prostate, bladder, and kidney cancer cell lines and the use of IL-FABP as survival predictor in patients with renal cell carcinoma. *BMC Cancer* 11: 302.
- Smathers, R.L., et al. 2011. The human fatty acid-binding protein family: evolutionary divergences and functions. *Hum. Genomics* 5: 170-191.

### CHROMOSOMAL LOCATION

Genetic locus: FABP12 (human) mapping to 8q21.13; Fabp12 (mouse) mapping to 3 A1.

### SOURCE

FABP12 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FABP12 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-241409 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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.

### APPLICATIONS

FABP12 (D-14) is recommended for detection of FABP12 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); non cross-reactive with other FABP family members.

FABP12 (D-14) is also recommended for detection of FABP12 in additional species, including equine and canine.

Suitable for use as control antibody for FABP12 siRNA (m): sc-108294, FABP12 shRNA Plasmid (m): sc-108294-SH and FABP12 shRNA (m) Lentiviral Particles: sc-108294-V.

Molecular Weight of FABP12: 15 kDa.

### 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.

### PROTOCOLS

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