SANTA CRUZ BIOTECHNOLOGY, INC.

FIBP (S-14): sc-138003



The Power to Question

BACKGROUND

Fibroblast growth factors (FGFs) represent a family of over 20 distinct proteins that are ubiquitously expressed in mammalian systems. FGF activity influences development, adult tissue homeostasis, angiogenesis and cancer progression. The FGF-1 intracellular-binding protein (FIBP) is a 364 amino acid protein that binds to internalized FGF-1 and is thought to be involved in mitogenic function of FGF-1. FIBP localizes to the nucleus and is highly expressed in heart, skeletal muscle and pancreas and at lower levels in brain, placenta, liver and kidney. The gene encoding FIBP is expressed as two isoforms, designated long and short, which are produced as a result of alternative splicing events.

REFERENCES

- Volkin, D.B. and Middaugh, C.R. 1996. The characterization, stabilization, and formulation of acidic fibroblast growth factor. Pharm. Biotechnol. 9: 181-217.
- 2. Guo, C., et al. 1997. Biological function and clinical use of fibroblast growth factors. Zhongguo Xiu Fu Chong Jian Wai Ke Za Zhi 11: 272-275.
- 3. Kolpakova, E., et al. 1998. Cloning of an intracellular protein that binds selectively to mitogenic acidic fibroblast growth factor. Biochem. J. 336: 213-222.
- Kolpakova, E., et al. 2000. Organization, chromosomal localization and promoter analysis of the gene encoding human acidic fibroblast growth factor intracellular binding protein. Biochem. J. 352 3: 629-635.
- Kolpakova, E., et al. 2003. Characterization and tissue expression of acidic fibroblast growth factor binding protein homologue in *Drosophila melanogaster*. Gene 310: 185-191.
- Wiedłocha, A. and Sørensen, V. 2004. Signaling, internalization, and intracellular activity of fibroblast growth factor. Curr. Top. Microbiol. Immunol. 286: 45-79.
- 7. Zakrzewska, M., et al. 2008. FGF-1: from biology through engineering to potential medical applications. Crit. Rev. Clin. Lab Sci. 45: 91-135.
- 8. Forde, N., et al. 2008. Differential expression of signal transduction factors in ovarian follicle development: a functional role for betaglycan and FIBP in granulosa cells in cattle. Physiol. Genomics 33: 193-204.

CHROMOSOMAL LOCATION

Genetic locus: FIBP (human) mapping to 11q13.1; Fibp (mouse) mapping to 19 A.

SOURCE

FIBP (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FIBP of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138003 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FIBP (S-14) is recommended for detection of FIBP 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).

FIBP (S-14) is also recommended for detection of FIBP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FIBP siRNA (h): sc-96425, FIBP siRNA (m): sc-145174, FIBP shRNA Plasmid (h): sc-96425-SH, FIBP shRNA Plasmid (m): sc-145174-SH, FIBP shRNA (h) Lentiviral Particles: sc-96425-V and FIBP shRNA (m) Lentiviral Particles: sc-145174-V.

Molecular Weight of FIBP: 42 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) Immunofluo-rescence: 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.