SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-BP3 (G-15): sc-164399

BACKGROUND

Fibroblast growth factors (FGFs) represent a family of over twenty distinct proteins that are ubiquitously expressed in mammalian systems. FGF activity influences development, adult tissue homeostasis, angiogenesis and cancer progression. Fibroblast growth factor binding protein, known as FGF-BP, is a secreted protein that binds FGF-1 and FGF-2 and is involved in mobilization and activation of FGFs from the extracellular matrix (ECM). FGF-BP expression is up-regulated during early phases of tumorigenesis, indicating that the role of FGF-BP in angiogenesis is a critical early step in the development and progression of tumors. The fibroblast growth factor-binding protein family also includes FGF-BP2 and FGF-BP3. FGF-BP3 is thought to play a critical role in the regulation of emotional states and in the development of anxiety disorders and may serve as a therapeutic target.

REFERENCES

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2. Tassi, E. and Wellstein, A. 2006. Tumor angiogenesis: initiation and targeting-therapeutic targeting of an FGF-binding protein, an angiogenic switch molecule, and indicator of early stages of gastrointestinal adenocarcinomas. Cancer Res Treat. 38: 189-197.
3. Abuharbeid, S., Czubayko, F. and Aigner, A. 2006. The fibroblast growth factor-binding protein FGF-BP. Int. J. Biochem. Cell Biol. 38: 1463-1468.
4. Tassi, E. and Wellstein, A. 2006. The angiogenic switch molecule, secreted FGF-binding protein, an indicator of early stages of pancreatic and colorectal adenocarcinoma. Semin. Oncol. 33: S50-S56.
5. Zhang, W., Chen, Y., Swift, M.R., Tassi, E., Stylianou, D.C., Gibby, K.A., Riegel, A.T. and Wellstein, A. 2008. Effect of FGF-binding protein 3 on vascular permeability. J. Biol. Chem. 283: 28329-28337.

CHROMOSOMAL LOCATION

Genetic locus: FGFBP3 (human) mapping to 10q23.32; Fgfbp3 (mouse) mapping to 19 C2.

SOURCE

FGF-BP3 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FGF-BP3 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-164399 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.

APPLICATIONS

FGF-BP3 (G-15) is recommended for detection of FGF-BP3 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 FGF-BP.

Suitable for use as control antibody for FGF-BP3 siRNA (h): sc-90736, FGF-BP3 siRNA (m): sc-145166, FGF-BP3 shRNA Plasmid (h): sc-90736-SH, FGF-BP3 shRNA Plasmid (m): sc-145166-SH, FGF-BP3 shRNA (h) Lentiviral Particles: sc-90736-V and FGF-BP3 shRNA (m) Lentiviral Particles: sc-145166-V.

Molecular Weight of FGF-BP3: 28 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.

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.