SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-18 (N-20): sc-16829



BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also designated basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int2) and FGF-4 (hst/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10–FGF-23. Members of the FGF family share 30-55% amino acid sequence identity and similar gene structure, and are capable of transforming cultured cells when overexpressed in transfected cells. Cellular receptors for FGFs are members of a second multigene family including four tyrosine kinases, designated FIg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

REFERENCES

- Moore, R., et al. 1986. Sequence, topography and protein coding potential of mouse int-2: a putative oncogene activated by mouse mammary tumor virus. EMBO J. 5: 919-924.
- Delli Bovi, P., et al. 1987. An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth factor that is a member of the FGF family. Cell 50: 729-737.
- 3. Zhan, X., et al. 1988. The human FGF-5 oncogene encodes a novel protein related to fibroblast growth factors. Mol. Cell. Biol. 8: 3487-3495.
- Marics, I., et al. 1989.Characterization of the HST-related FGF-6 gene, a new member of the fibroblast gene factor family. Oncogene 4: 335-340.
- Rifkin, D.B. and Moscatelli, D. 1989. Recent developments in the cell biology of fibroblast growth factor. J. Cell Biol. 109: 1-6.
- 6. Dionne, C.A., et al. 1990. Cloning and expression of two distinct highaffinity receptors cross-reacting with acidic and basic fibroblast growth factors. EMBO J. 9: 2685-2692.
- Tanaka, A., et al. 1992. Cloning and characterization of an androgen-induced growth factor essential for the androgen-dependent growth of mouse mammary carcinoma cells. Proc. Natl. Acad. Sci. USA 89: 8928-8932.
- 8. Miyamoto, M., et al. 1993. Molecular cloning of a novel cytokine cDNA encoding the ninth member of the fibroblast growth factor family, which has a unique secretion property. Mol. Cell. Biol. 13: 4251-4259.
- Beer, H.D., et al. 1997. Mouse fibroblast growth factor 10: cDNA cloning, protein characterization, and regulation of mRNA expression. Oncogene 15: 2211-2218.

CHROMOSOMAL LOCATION

Genetic locus: FGF18 (human) mapping to 5q35.1; Fgf18 (mouse) mapping to 11 A4.

SOURCE

FGF-18 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FGF-18 of human 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-16829 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-18 (N-20) is recommended for detection of FGF-18 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).

FGF-18 (N-20) is also recommended for detection of FGF-18 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FGF-18 siRNA (h): sc-39478, FGF-18 siRNA (m): sc-39479, FGF-18 shRNA Plasmid (h): sc-39478-SH, FGF-18 shRNA Plasmid (m): sc-39479-SH, FGF-18 shRNA (h) Lentiviral Particles: sc-39478-V and FGF-18 shRNA (m) Lentiviral Particles: sc-39479-V.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **FGF-18 (C-6): sc-393471**, our highly recommended monoclonal alternative to FGF-18 (N-20).