# FGF-3 (M-20): sc-1393



The Power to Question

#### **BACKGROUND**

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also referred to as 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. Members of the FGF family share 30-55% amino acid sequence identity, 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 Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

## **REFERENCES**

- 1. 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.
- 4. Rifkin, D.B., et al. 1989. Recent developments in the cell biology of fibroblast growth factor. J. Cell Biol. 109: 1-6.
- Marics, I., et al. 1989. Characterization of the HST-related FGF.6 gene, a new member of the fibroblast growth factor gene family. Oncogene 4: 335-340.
- 6. Dionne, C.A., et al. 1990. Cloning and expression of two distinct high-affinity 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 androgeninduced 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: FGF3 (mouse) mapping to 7 F5.

#### **SOURCE**

FGF-3 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FGF-3 of mouse origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1393 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

FGF-3 (M-20) is recommended for detection of precursor and mature FGF-3 of mouse and rat 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).

Suitable for use as control antibody for FGF-3 siRNA (m): sc-39449, FGF-3 siRNA (m): sc-39449, FGF-3 shRNA Plasmid (m): sc-39449-SH, FGF-3 shRNA (m) Lentiviral Particles: sc-39449-V and FGF-3 shRNA (m) Lentiviral Particles: sc-39449-V.

Molecular Weight of FGF-3: 29-31 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211 or c4 whole cell lysate: sc-364186.

#### **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.

### **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.

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