

FGF-1 (C-18): sc-1359

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

- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF1 (human) mapping to 5q31.3; Fgf1 (mouse) mapping to 18 B3.

SOURCE

FGF-1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FGF-1 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-1359 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-1 (C-18) is recommended for detection of precursor and mature FGF-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FGF-1 (C-18) is also recommended for detection of precursor and mature FGF-1 in additional species, including equine, canine and porcine.

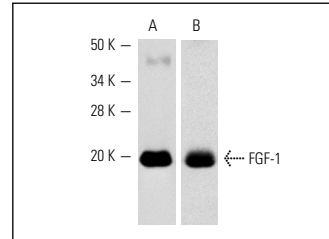
Suitable for use as control antibody for FGF-1 siRNA (h): sc-39444, FGF-1 siRNA (m): sc-39445, FGF-1 shRNA Plasmid (h): sc-39444-SH, FGF-1 shRNA Plasmid (m): sc-39445-SH, FGF-1 shRNA (h) Lentiviral Particles: sc-39444-V and FGF-1 shRNA (m) Lentiviral Particles: sc-39445-V.

Molecular Weight of FGF-1: 16 kDa.

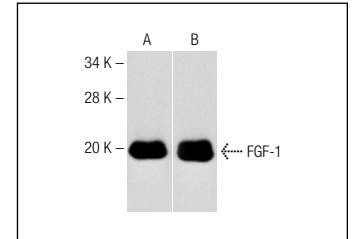
STORAGE

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

DATA



Western blot analysis of human recombinant FGF-1. Antibodies tested include: FGF-1 (C-18): sc-1359 (A) and FGF-1 (H-125): sc-7910 (B).



Western blot analysis of human recombinant FGF-1. Antibodies tested include FGF-1 (C-18): sc-1359 (A) and FGF-1 (C-19): sc-1884 (B).

SELECT PRODUCT CITATIONS

- Rosini, P., et al. 2002. Androgen receptor expression induces FGF-2, FGF-binding protein production, and FGF-2 release in prostate carcinoma cells: role of FGF-2 in growth, survival, and androgen receptor down-modulation. *Prostate* 53: 310-321.
- Wiedlocha, A., et al. 2005. Phosphorylation-regulated nucleocytoplasmic trafficking of internalized fibroblast growth factor-1. *Mol. Biol. Cell* 16: 794-810.
- Ma, Z., et al. 2007. Silencing of the type 1 Insulin-like growth factor receptor increases the sensitivity to apoptosis and inhibits invasion in human lung adenocarcinoma A-549 cells. *Cell. Mol. Biol. Lett.* 12: 556-572.
- Gao, F.J., et al. 2008. Des-γ-carboxy prothrombin increases the expression of angiogenic factors in human hepatocellular carcinoma cells. *Life Sci.* 83: 815-820.
- Gao, J.J., et al. 2011. LYP, a bestatin dimethylaminoethyl ester, inhibited cancer angiogenesis both *in vitro* and *in vivo*. *Microvasc. Res.* 82: 122-130.
- Tian, X., et al. 2012. Interactions of pancreatic cancer and stellate cells are mediated by FGFR1-III isoform expression. *Hepatogastroenterology* 59: 1604-1608.

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.



Try **FGF-1 (B-3): sc-55520** or **FGF-1 (D-11): sc-13123**, our highly recommended monoclonal alternatives to FGF-1 (C-18).