

FGF-5 (FL-268): sc-7914

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 (Int-2) 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. FGF-5, also designated Smag-82 and HBGF-5 was identified as the product of an oncogene and the protein is expressed in neonatal brain. Alternative splicing results in long and short isoforms (FGF-5S) of the protein where the C-terminal residues 124-268 are missing in the truncated FGF-5S.

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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF5 (human) mapping to 4q21.21; Fgf5 (mouse) mapping to 5 E3.

SOURCE

FGF-5 (FL-268) is a rabbit polyclonal antibody raised against amino acids 1-268 representing full length FGF-5 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.

STORAGE

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

APPLICATIONS

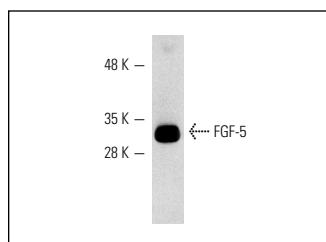
FGF-5 (FL-268) is recommended for detection of precursor and mature FGF-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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-5 siRNA (h): sc-39452, FGF-5 siRNA (m): sc-39453, FGF-5 shRNA Plasmid (h): sc-39452-SH, FGF-5 shRNA Plasmid (m): sc-39453-SH, FGF-5 shRNA (h) Lentiviral Particles: sc-39452-V and FGF-5 shRNA (m) Lentiviral Particles: sc-39453-V.

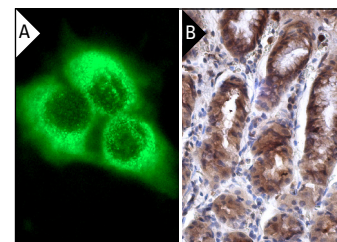
Molecular Weight of FGF-5: 34 kDa.

Positive Controls: A-375 cell lysate: sc-3811, ARPE-19 whole cell lysate: sc-364357 or Hs 732.Sk/Mu whole cell lysate: sc-364362.

DATA



FGF-5 (FL-268): sc-7914. Western blot analysis of human recombinant FGF-5.



FGF-5 (FL-268): sc-7914. Immunofluorescence staining of methanol-fixed BC₃H1 cells showing cytoplasmic localization. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Cai, C., et al. 2008. Hedgehog serves as a mitogen and survival factor during embryonic stem cell neurogenesis. *Stem Cells* 26: 1097-1108.
- Tian, X., et al. 2012. Interactions of pancreatic cancer and stellate cells are mediated by FGFR1-III isoform expression. *Hepatogastroenterology* 59: 1604-1608.
- Ye, B., et al. 2014. Pcid2 inactivates developmental genes in human and mouse embryonic stem cells to sustain their pluripotency by modulation of EID1 stability. *Stem Cells* 32: 623-635.

RESEARCH USE

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

MONOS
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Try **FGF-5 (F-11): sc-376264** or **FGF-5 (4i159): sc-71106**, our highly recommended monoclonal alternatives to FGF-5 (FL-268).