

FGF-5 (M-19): sc-1363

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 multi-gene 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.
- Marics, I., et al. 1989. Characterization of the HST-related FGF6 gene, a new member of the fibroblast growth factor gene family. *Oncogene* 4: 335-340.
- Rifkin, D.B., et al. 1989. Recent developments in the cell biology of fibroblast growth factor. *J. Cell Biol.* 109: 1-6.

CHROMOSOMAL LOCATION

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

SOURCE

FGF-5 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FGF-5 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-1363 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

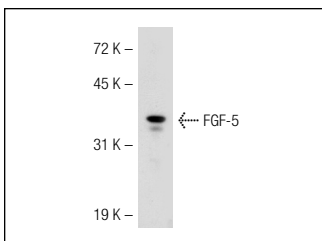
FGF-5 (M-19) is recommended for detection of precursor and mature FGF-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunohistochemistry (including paraffin-embedded 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.

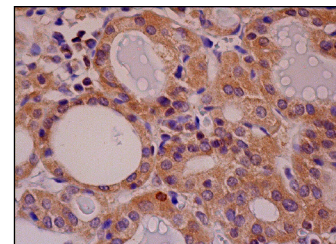
Molecular Weight of FGF-5: 34 kDa.

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

DATA



FGF-5 (M-19): sc-1363. Western blot analysis of FGF-5 expression in A-375 whole cell lysate.



FGF-5 (M-19): sc-1363. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Scarlato, M., et al. 2001. Axon-Schwann cell interactions regulate the expression of fibroblast growth factor-5 (FGF-5). *J. Neurosci. Res.* 66: 16-22.
- Tanaka, Y., et al. 2008. Expression of mRNA for specific fibroblast growth factors associates with that of the myogenic markers MyoD and proliferating cell nuclear antigen in regenerating and overloaded rat plantaris muscle. *Acta Physiol.* 194: 149-159.
- Otsu, M., et al. 2011. Uni-directional differentiation of mouse embryonic stem cells into neurons by the neural stem sphere method. *Neurosci. Res.* 69: 314-321.

RESEARCH USE

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



Try **FGF-5 (F-11): sc-376264** or **FGF-5 (4i159): sc-71106**, our highly recommended monoclonal alternatives to FGF-5 (M-19).