

FGF-5 (F-11): sc-376264



The Power to Question

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 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF5 (human) mapping to 4q21.21.

SOURCE

FGF-5 (F-11) is a mouse monoclonal antibody raised against amino acids 1-268 representing full length FGF-5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-5 (F-11) is available conjugated to agarose (sc-376264 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376264 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376264 PE), fluorescein (sc-376264 FITC), Alexa Fluor® 488 (sc-376264 AF488), Alexa Fluor® 546 (sc-376264 AF546), Alexa Fluor® 594 (sc-376264 AF594) or Alexa Fluor® 647 (sc-376264 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376264 AF680) or Alexa Fluor® 790 (sc-376264 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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 (F-11) is recommended for detection of precursor and mature FGF-5 of human origin by Western Blotting (starting dilution 1:100, 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) 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 shRNA Plasmid (h): sc-39452-SH and FGF-5 shRNA (h) Lentiviral Particles: sc-39452-V.

Molecular Weight of FGF-5: 34 kDa.

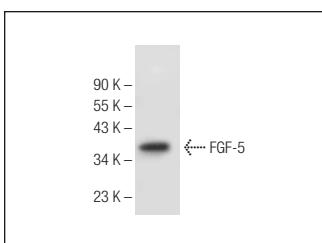
Positive Controls: A-375 cell lysate: sc-3811, ARPE-19 whole cell lysate: sc-364357 or Hs 732.Sk/Mu whole cell lysate: sc-364362.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FGF-5 (F-11): sc-376264. Western blot analysis of FGF-5 expression in Hs 732.Sk/Mu whole cell lysate.

SELECT PRODUCT CITATIONS

- Zhu, Z., et al. 2021. Hsa_circ_0016760 exacerbates the malignant development of non small cell lung cancer by sponging miR-145-5p/FGF-5. *Oncol. Rep.* 45: 501-512.
- Takahashi, R., et al. 2022. Gender-difference in hair length as revealed by crispr-based production of long-haired mice with dysfunctional FGF-5 mutations. *Int. J. Mol. Sci.* 23: 11855.
- Chen, G., et al. 2023. Fibroblast growth factor 18 alleviates stress-induced pathological cardiac hypertrophy in male mice. *Nat. Commun.* 14: 1235.

RESEARCH USE

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