

FGF-18 (C-16): sc-16830



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.

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.
2. 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF18 (human) mapping to 5q35.1, FGF8 (human) mapping to 10q24.32; Fgf18 (mouse) mapping to 11 A4, Fgf8 (mouse) mapping to 19 C3.

SOURCE

FGF-18 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FGF-18 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-16830 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-18 (C-16) is recommended for detection of precursor and mature FGF-18 and FGF-8 of mouse, rat and human 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).

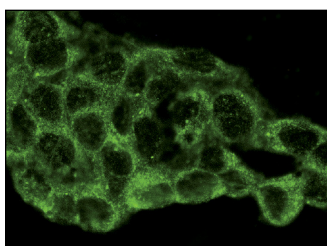
FGF-18 (C-16) is also recommended for detection of precursor and mature FGF-18 and FGF-8 in additional species, including canine, bovine, porcine and avian.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

DATA



FGF-18 (C-16): sc-16830 Immunofluorescence staining of methanol-fixed Hep G2 cells showing cytoplasmic and cell surface localization.

SELECT PRODUCT CITATIONS

1. Reinhold, M.I., et al. 2007. Direct interactions of Runx2 and canonical Wnt signaling induce FGF-18. *J. Biol. Chem.* 282: 3653-3663.
2. Sonvilla, G., et al. 2008. FGF-18 in colorectal tumour cells: autocrine and paracrine effects. *Carcinogenesis* 29: 15-24.
3. Portela, V.M., et al. 2010. Expression and function of fibroblast growth factor 18 in the ovarian follicle in cattle. *Biol. Reprod.* 83: 339-346.
4. Metzner, T., et al. 2011. Fibroblast growth factor receptors as therapeutic targets in human melanoma: synergism with BRAF inhibition. *J. Invest. Dermatol.* 131: 2087-2095.

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.



Try **FGF-18 (C-6): sc-393471**, our highly recommended monoclonal alternative to FGF-18 (C-16).