

FGF-14 (C-18): sc-16814

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.
- 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 FGF6 gene, a new member of the fibroblast growth factor gene family. *Oncogene* 4: 335-340.

CHROMOSOMAL LOCATION

Genetic locus: FGF14 (human) mapping to 13q33.1; Fgf14 (mouse) mapping to 14 E5.

SOURCE

FGF-14 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FGF-14 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-16814 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

FGF-14 (C-18) is recommended for detection of precursor and mature FGF-14 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FGF-14 (C-18) is also recommended for detection of precursor and mature FGF-14 in additional species, including equine, canine, bovine, porcine and avian.

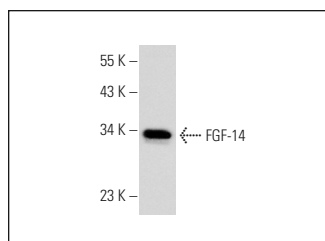
Suitable for use as control antibody for FGF-14 siRNA (h): sc-39470, FGF-14 siRNA (m): sc-39471, FGF-14 shRNA Plasmid (h): sc-39470-SH, FGF-14 shRNA Plasmid (m): sc-39471-SH, FGF-14 shRNA (h) Lentiviral Particles: sc-39470-V and FGF-14 shRNA (m) Lentiviral Particles: sc-39471-V.

Positive Controls: U-251-MG cell lysate: sc-364176 or SH-SY5Y nuclear extract: sc-364820.

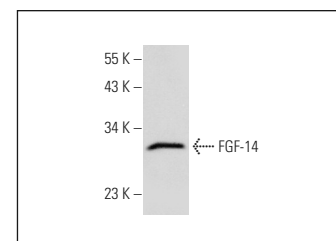
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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-14 (C-18): sc-16814. Western blot analysis of FGF-14 expression in SH-SY5Y nuclear extract.



FGF-14 (C-18): sc-16814. Western blot analysis of FGF-14 expression in U-251-MG whole cell lysate.

SELECT PRODUCT CITATIONS

- Hu, X.L., et al. 2011. Conditional deletion of NRSF in forebrain neurons accelerates epileptogenesis in the kindling model. *Cereb. Cortex.* 21: 2158-2165.

RESEARCH USE

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