SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-8 (N-19): sc-6958



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 FIg (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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF8 (human) mapping to 10q24.32, FGF17 (human) mapping to 8p21.3; Fgf8 (mouse) mapping to 19 C3, Fgf17 (mouse) mapping to 14 D2.

SOURCE

FGF-8 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FGF-8 of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6958 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-8 (N-19) is recommended for detection of precursor and mature FGF-8 and, to a lesser extent, FGF-17 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)], immuno-fluorescence (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-8 (N-19) is also recommended for detection of FGF-8 and, to a lesser extent, FGF-17 in additional species, including canine, bovine, porcine and avian.

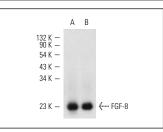
Molecular Weight of FGF-8: 30 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or LNCaP cell lysate: sc-2231.

STORAGE

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

DATA



FGF-8 (N-19): sc-6958. Western blot analysis of human recombinant FGF-8 (**A**) and mouse recombinant FGF-8 (**B**).

1ant FGF-8 (**B**).

SELECT PRODUCT CITATIONS

- Valve, E., et al. 2000. Expression of fibroblast growth factor FGF-8 isoforms and FGF receptors in human ovarian tumors. Intl. J. Cancer 88: 718-725.
- Jaskoll, T., et al. 2004. Sonic Hedgehog signaling plays an essential role during embryonic salivary gland epithelial branching morphogenesis. Dev. Dyn. 229: 722-732.
- Thewissen, J.G., et al. 2006. Developmental basis for hind-limb loss in dolphins and origin of the cetacean bodyplan. Proc. Natl. Acad. Sci. USA 103: 8414-8418.
- 4. Seifert, A.W., et al. 2009. Functional and phylogenetic analysis shows that Fgf8 is a marker of genital induction in mammals but is not required for external genital development. Development 136: 2643-2651.
- Owtad, P., et al. 2011. A histochemical study on condylar cartilage and glenoid fossa during mandibular advancement. Angle Orthod. 81: 270-276.
- Farahani, R.M., et al. 2012. Directed glia-assisted angiogenesis in a mature neurosensory structure: pericytes mediate an adaptive response in human dental pulp that maintains blood-barrier function. J. Comp. Neurol. 520: 3803-3826.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed Try FGF-8 (2A10): sc-293479, our highly recommended monoclonal alternative to FGF-8 (N-19).