SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-2 (N-19): sc-1390

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (Int-2) 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 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.

CHROMOSOMAL LOCATION

Genetic locus: FGF2 (human) mapping to 4q27; Fgf2 (mouse) mapping to 3 B.

SOURCE

FGF-2 (N-19) is available as either goat (sc-1390) or rabbit (sc-1390-R) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of FGF-2 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-1390 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGF-2 (N-19) is recommended for detection of precursor and mature FGF-2 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), 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).

FGF-2 (N-19) is also recommended for detection of precursor and mature FGF-2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FGF-2 siRNA (h): sc-39446, FGF-2 siRNA (m): sc-39447, FGF-2 shRNA Plasmid (h): sc-39446-SH, FGF-2 shRNA Plasmid (m): sc-39447-SH, FGF-2 shRNA (h) Lentiviral Particles: sc-39446-V and FGF-2 shRNA (m) Lentiviral Particles: sc-39447-V.

Molecular Weight of FGF-2 isoforms: 18/21/24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, COLO 320DM cell lysate: sc-2226 or Hep G2 cell lysate: sc-2227.

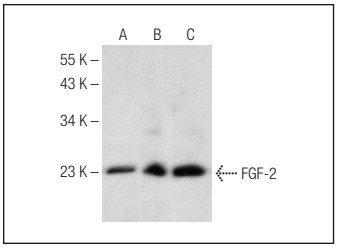
STORAGE

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

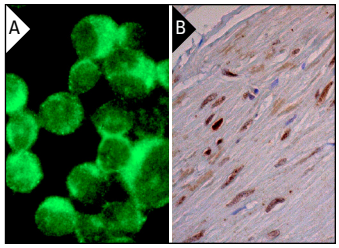
RESEARCH USE

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

DATA



FGF-2 (N-19): sc-1390. Western blot analysis of FGF-2 expression in 293T (**A**), COLO 320DM (**B**) and Hep G2 (**C**) whole cell lysates.



FGF-2 (N-19): sc-1390. Immunofluorescence staining of methanol-fixed COLO 320DM cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human smooth muscle tissue showing nuclear staining of smooth muscle cells (**B**).

SELECT PRODUCT CITATIONS

1. Małecki, M., et al. 2003. Construction of a bicistronic proangiogenic expression vector and its application in experimental angiogenesis *in vivo*. Acta Biochim. Pol. 50: 875-882.
2. Bribián, A., et al. 2006. Anosmin-1 modulates the FGF-2-dependent migration of oligodendrocyte precursors in the developing optic nerve. Mol. Cell. Neurosci. 33: 2-14.
3. Mudò, G., et al. 2007. Acute intermittent nicotine treatment induces fibroblast growth factor-2 in the subventricular zone of the adult rat brain and enhances neuronal precursor cell proliferation. Neuroscience 145: 470-483.
4. Montano, M.M., et al. 2008. Mutation of the HEXIM1 gene results in defects during heart and vascular development partly through downregulation of vascular endothelial growth factor. Circ. Res. 102: 415-422.

PROTOCOLS

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