SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-2 (6): sc-136255

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.

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.

CHROMOSOMAL LOCATION

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

SOURCE

FGF-2 (6) is a mouse monoclonal antibody raised against amino acids 1-155 representing full length FGF-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-2 (6) is available conjugated to agarose (sc-136255 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-136255 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

APPLICATIONS

FGF-2 (6) is recommended for detection of FGF-2 of mouse, rat, human and canine 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for FGF-2 siRNA (h): sc-39446, FGF-2 siRNA (m): sc-39447, FGF-2 siRNA (r): sc-108055, FGF-2 shRNA Plasmid (h): sc-39446-SH, FGF-2 shRNA Plasmid (m): sc-39447-SH, FGF-2 shRNA Plasmid (r): sc-108055-SH, FGF-2 shRNA (h) Lentiviral Particles: sc-39446-V, FGF-2 shRNA (m) Lentiviral Particles: sc-39447-V and FGF-2 shRNA (r) Lentiviral Particles: sc-108055-V.

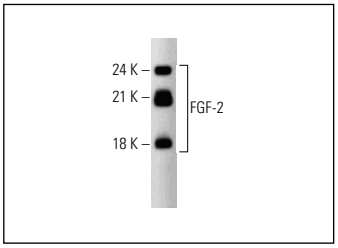
Molecular Weight of FGF-2 isoforms: 18/21/24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

STORAGE

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

DATA



FGF-2 (6): sc-136255. Western blot analysis of FGF-2 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Jürgenson, M., et al. 2012. Partial reduction in neural cell adhesion molecule (NCAM) in heterozygous mice induces depression-related behaviour without cognitive impairment. Brain Res. 1447: 106-118.
2. Jia, X., et al. 2015. High-efficiency expression of TAT-bFGF fusion protein in *Escherichia coli* and the effect on hypertrophic scar tissue. PLoS ONE 10: e0117448.
3. Zhou, X., et al. 2018. Melanoma cell-secreted exosomal miR-155-5p induce proangiogenic switch of cancer-associated fibroblasts via SOCS1/JAK2/Stat3 signaling pathway. J. Exp. Clin. Cancer Res. 37: 242.
4. Cai, Y., et al. 2019. Functional suppression of Epiregulin impairs angiogenesis and aggravates left ventricular remodeling by disrupting the extracellular-signal-regulated kinase1/2 signaling pathway in rats after acute myocardial infarction. J. Cell. Physiol. 234: 18653-18665.
5. Zhong, S.J., et al. 2020. Ginsenoside Rg1 ameliorates the cognitive deficits in D-galactose and $AlCl_3$-induced aging mice by restoring FGF2-Akt and BDNF-TrkB signaling axis to inhibit apoptosis. Int. J. Med. Sci. 17: 1048-1055.
6. Liu, X., et al. 2021. Neuroprotective effects of bone marrow Sca-1^+ cells against age-related retinal degeneration in OPTN E50K mice. Cell Death Dis. 12: 613.
7. Li, X.X., et al. 2022. *Coeloglossum viride* var. *bracteatum* extract attenuates Aβ-induced toxicity by inhibiting RIP1-driven inflammation and necroptosis. J. Ethnopharmacol. 282: 114606.
8. Lang, X.Y., et al. 2022. *Coeloglossum viride* var. *Bracteatum* extract attenuates MPTP-induced neurotoxicity *in vivo* by restoring BDNF-TrkB and FGF2-Akt signaling axis and inhibiting RIP1-driven inflammation. Front. Pharmacol. 13: 903235.

RESEARCH USE

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