

FGF-1 (B-3): sc-55520

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.

CHROMOSOMAL LOCATION

Genetic locus: FGF1 (human) mapping to 5q31.3.

SOURCE

FGF-1 (B-3) is a mouse monoclonal antibody raised against amino acids 16-140 of FGF-1 of human origin.

PRODUCT

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

FGF-1 (B-3) is available conjugated to agarose (sc-55520 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55520 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55520 PE), fluorescein (sc-55520 FITC), Alexa Fluor[®] 488 (sc-55520 AF488), Alexa Fluor[®] 546 (sc-55520 AF546), Alexa Fluor[®] 594 (sc-55520 AF594) or Alexa Fluor[®] 647 (sc-55520 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-55520 AF680) or Alexa Fluor[®] 790 (sc-55520 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FGF-1 (B-3) is recommended for detection of FGF-1 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for FGF-1 siRNA (h): sc-39444, FGF-1 shRNA Plasmid (h): sc-39444-SH and FGF-1 shRNA (h) Lentiviral Particles: sc-39444-V.

Molecular Weight of FGF-1: 16 kDa.

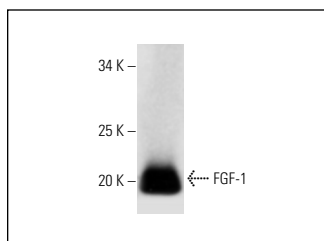
STORAGE

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

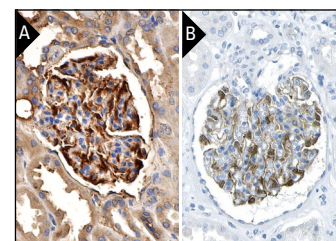
RESEARCH USE

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

DATA



FGF-1 (B-3): sc-55520. Western blot analysis of human recombinant FGF-1.



FGF-1 (B-3): sc-55520. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in glomeruli. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in glomeruli (B).

SELECT PRODUCT CITATIONS

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- Sak, M.E., et al. 2013. Fibroblast growth factor-1 expression in the endometrium of patients with repeated implantation failure after *in vitro* fertilization. *Eur. Rev. Med. Pharmacol. Sci.* 17: 398-402.
- Lee, J.C., et al. 2016. Characterization of FN1-FGFR1 and novel FN1-FGF1 fusion genes in a large series of phosphaturic mesenchymal tumors. *Mod. Pathol.* 29: 1335-1346.
- Wang, S., et al. 2020. Adipocyte Piezo1 mediates obesogenic adipogenesis through the FGF1/FGFR1 signaling pathway in mice. *Nat. Commun.* 11: 2303.
- Okur, M.E., et al. 2020. *In vivo* wound healing and *in vitro* anti-inflammatory activity evaluation of *Phlomis russeliana* extract gel formulations. *Molecules* 25: 2695.
- Okur, M.E., et al. 2020. Anti-inflammatory, analgesic and *in vivo-in vitro* wound healing potential of the *Phlomis rigida* Labill. extract. *J. Ethnopharmacol.* 266: 113408.
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PROTOCOLS

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