

FGF-3 (MSD 1): sc-135

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.

CHROMOSOMAL LOCATION

Genetic locus: FGF3 (human) mapping to 11q13.3; Fgf3 (mouse) mapping to 7 F5.

SOURCE

FGF-3 (MSD 1) is a mouse monoclonal antibody raised against an Int-2 synthetic peptide.

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-3 (MSD 1) is available conjugated to agarose (sc-135 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-135 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-135 PE), fluorescein (sc-135 FITC), Alexa Fluor[®] 488 (sc-135 AF488), Alexa Fluor[®] 546 (sc-135 AF546), Alexa Fluor[®] 594 (sc-135 AF594) or Alexa Fluor[®] 647 (sc-135 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-135 AF680) or Alexa Fluor[®] 790 (sc-135 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FGF-3 (MSD 1) is recommended for detection of precursor and mature FGF-3 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for FGF-3 siRNA (h): sc-39448, FGF-3 siRNA (m): sc-39449, FGF-3 shRNA Plasmid (h): sc-39448-SH, FGF-3 shRNA Plasmid (m): sc-39449-SH, FGF-3 shRNA (h) Lentiviral Particles: sc-39448-V and FGF-3 shRNA (m) Lentiviral Particles: sc-39449-V.

Molecular Weight of FGF-3: 29-31 kDa.

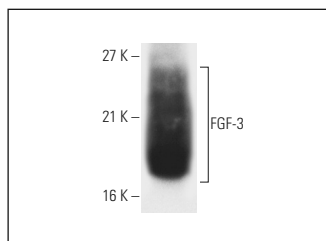
STORAGE

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

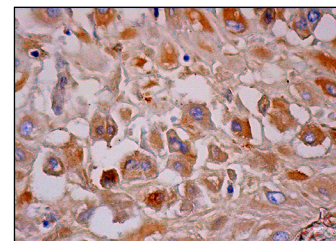
RESEARCH USE

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

DATA



FGF-3 (MSD 1): sc-135. Western blot analysis of human recombinant FGF-3.



FGF-3 (MSD 1): sc-135. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

SELECT PRODUCT CITATIONS

- Harada, H., et al. 2002. FGF-10 maintains stem cell compartment in developing mouse incisors. *Development* 129: 1533-1541.
- Vos, M.D., et al. 2003. RASSF2 is a novel K-Ras-specific effector and potential tumor suppressor. *J. Biol. Chem.* 278: 28045-28051.
- Vertrees, R.A., et al. 2004. Smoke/burn injury-induced respiratory failure elicits apoptosis in ovine lungs and cultured lung cells, ameliorated with arteriovenous CO₂ removal. *Chest* 125: 1472-1482.
- Tai, A.L., et al. 2006. Co-overexpression of fibroblast growth factor 3 and epidermal growth factor receptor is correlated with the development of nonsmall cell lung carcinoma. *Cancer* 106: 146-155.
- Hu, L., et al. 2007. Up-regulation of fibroblast growth factor 3 is associated with tumor metastasis and recurrence in human hepatocellular carcinoma. *Cancer Lett.* 252: 36-42.
- Li, X., et al. 2008. A novel connexin43-interacting protein, CIP75, which belongs to the Ubl-UBA protein family, regulates the turnover of connexin 43. *J. Biol. Chem.* 283: 5748-5759.
- Cases, O., et al. 2013. Cubilin, a high affinity receptor for fibroblast growth factor 8, is required for cell survival in the developing vertebrate head. *J. Biol. Chem.* 288: 16655-16670.
- Roy, D. and Calaf, G.M. 2014. Allelic loss at chromosome 11q13 alters FGF-3 gene expression in a human breast cancer progression model. *Oncol. Rep.* 32: 2445-2452.
- Bae, J.M., et al. 2018. Specificity protein 7 is required for proliferation and differentiation of ameloblasts and odontoblasts. *J. Bone Miner. Res.* 33: 1126-1140.
- Chen, G., et al. 2023. Fibroblast growth factor 18 alleviates stress-induced pathological cardiac hypertrophy in male mice. *Nat. Commun.* 14: 1235.

PROTOCOLS

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