SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-18 (C-6): sc-393471

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 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: FGF18 (human) mapping to 5q35.1; Fgf18 (mouse) mapping to 11 A4.

SOURCE

FGF-18 (C-6) is a mouse monoclonal antibody raised against amino acids 93-136 mapping within an internal region of FGF-18 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-18 (C-6) is available conjugated to agarose (sc-393471 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393471 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393471 PE), fluorescein (sc-393471 FITC), Alexa Fluor® 488 (sc-393471 AF488), Alexa Fluor® 546 (sc-393471 AF546), Alexa Fluor® 594 (sc-393471 AF594) or Alexa Fluor® 647 (sc-393471 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393471 AF680) or Alexa Fluor® 790 (sc-393471 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

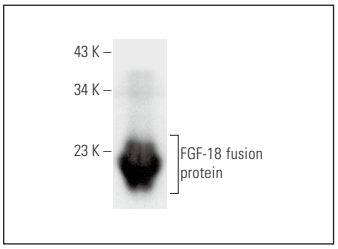
FGF-18 (C-6) is recommended for detection of FGF-18 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FGF-18 siRNA (h): sc-39478, FGF-18 siRNA (m): sc-39479, FGF-18 shRNA Plasmid (h): sc-39478-SH, FGF-18 shRNA Plasmid (m): sc-39479-SH, FGF-18 shRNA (h) Lentiviral Particles: sc-39478-V and FGF-18 shRNA (m) Lentiviral Particles: sc-39479-V.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FGF-18 (C-6): sc-393471. Western blot analysis of human recombinant FGF-18 fusion protein.

SELECT PRODUCT CITATIONS

1. Kannan, A., et al. 2018. Characterization of molecular changes in endometrium associated with chronic use of progesterone receptor modulators: ulipristal acetate versus mifepristone. Reprod. Sci. 25: 320-328.
2. Tong, G., et al. 2022. Fibroblast growth factor 18 attenuates liver fibrosis and HSCs activation via the SMO-LATS1-YAP pathway. Pharmacol. Res. 178: 106139.
3. Cai, S., et al. 2023. Transcriptomic analysis of the upper lip and primary palate development in mice. Front. Genet. 13: 1039850.
4. Chen, G., et al. 2023. Fibroblast growth factor 18 alleviates stress-induced pathological cardiac hypertrophy in male mice. Nat. Commun. 14: 1235.
5. Tong, G., et al. 2023. FGF18 alleviates hepatic ischemia-reperfusion injury via the USP16-mediated KEAP1/Nrf2 signaling pathway in male mice. Nat. Commun. 14: 6107.
6. Hu, Z., et al. 2024. FGF18 alleviates sepsis-induced acute lung injury by inhibiting the NFκB pathway. Respir. Res. 25: 108.

RESEARCH USE

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

PROTOCOLS

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