SANTA CRUZ BIOTECHNOLOGY, INC.

FGF-17 (B-4): sc-376056



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 FIg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

REFERENCES

- 1. Rifkin, D.B., et al. 1989. Recent developments in the cell biology of fibroblast growth factor. J. Cell Biol. 109: 1-6.
- 2. Dionne, C.A., et al. 1990. Cloning and expression of two distinct highaffinity receptors cross-reacting with acidic and basic fibroblast growth factors. EMBO J. 9: 2685-2692.
- Mansukhani, A., et al. 1992. Characterization of the murine BEK fibroblast growth factor (FGF) receptor: activation by three members of the FGF family and requirement for heparin. Proc. Natl. Acad. Sci. USA 89: 3305-3309.

CHROMOSOMAL LOCATION

Genetic locus: FGF17 (human) mapping to 8p21.3; Fgf17 (mouse) mapping to 14 D2.

SOURCE

FGF-17 (B-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 183-215 near the C-terminus of FGF-17 of human origin.

PRODUCT

Each vial contains 200 $\mu g\, lg G_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-17 (B-4) is available conjugated to agarose (sc-376056 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376056 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376056 PE), fluorescein (sc-376056 FITC), Alexa Fluor® 488 (sc-376056 AF488), Alexa Fluor® 546 (sc-376056 AF546), Alexa Fluor® 594 (sc-376056 AF594) or Alexa Fluor® 647 (sc-376056 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376056 AF680) or Alexa Fluor® 790 (sc-376056 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376056 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

FGF-17 (B-4) is recommended for detection of precursor and mature FGF-17 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), immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for FGF-17 siRNA (h): sc-39476, FGF-17 siRNA (m): sc-39477, FGF-17 shRNA Plasmid (h): sc-39476-SH, FGF-17 shRNA Plasmid (m): sc-39477-SH, FGF-17 shRNA (h) Lentiviral Particles: sc-39476-V and FGF-17 shRNA (m) Lentiviral Particles: sc-39477-V.

Molecular Weight of FGF-17: 23 kDa.

Positive Controls: mouse brain extract: sc-2253.

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA





FGF-17 (B-4): sc-376056. Western blot analysis of human recombinant FGF-17.

FGF-17 (B-4): sc-376056. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of follicle cells and ovarian stroma cells.

SELECT PRODUCT CITATIONS

 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.

STORAGE

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