SANTA CRUZ BIOTECHNOLOGY, INC.

FGFR-5 (H-300): sc-50326

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acidic and basic fibroblast growth factors (FGFs) are members of a family of multifunctional polypeptide growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuro-ectodermal origin. Like other growth factors, FGFs act by binding and activating specific cell surface receptors. A total of six members of the FGF receptor family have been identified and cloned. These include the Flg receptor or FGFR-1, the BEK receptor or FGFR-2, FGFR-3, FGFR-4, FGFR-5 and FGFR-6. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. However, FGFR-5 lacks the cytoplasmic kinase domain. FGFR-5 is expressed in a broad range of tissues, including kidney, brain and lung, but it is preferentially expressed in pancreas, where it may play a role in the regulation of some pancreatic function.

REFERENCES

1. Moscatelli, D., et al. 1987. Mr 25,000 heparin-binding protein from guinea pig brain is a high molecular weight form of basic fibroblast growth factor. Proc. Natl. Acad. Sci. USA 84: 5778-5782.
2. Rifkin, D.B., et al. 1989. Recent developments in the cell biology of fibroblast growth factor. J. Cell Biol. 109: 1-6.
3. Dionne, C.A., et al. 1990. Cloning and expression of two distinct high-affinity receptors cross-reacting with acidic and basic fibroblast growth factors. EMBO J. 9: 2685-2692.
4. Keegan, K., et al. 1991. Isolation of an additional member of the fibroblast growth factor receptor family, FGFR-3. Proc. Natl. Acad. Sci. USA 88: 1095-1099.

CHROMOSOMAL LOCATION

Genetic locus: FGFRL1 (human) mapping to 4p16.3; Fgfrl1 (mouse) mapping to 5 F.

SOURCE

FGFR-5 (H-300) is a rabbit polyclonal antibody raised against amino acids 31-330 mapping within an N-terminal extracellular domain of FGFR-5 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

FGFR-5 (H-300) is recommended for detection of FGFR-5 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)], 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).

FGFR-5 (H-300) is also recommended for detection of FGFR-5 in additional species, including bovine.

Suitable for use as control antibody for FGFR-5 siRNA (h): sc-39967, FGFR-5 siRNA (m): sc-39968, FGFR-5 shRNA Plasmid (h): sc-39967-SH, FGFR-5 shRNA Plasmid (m): sc-39968-SH, FGFR-5 shRNA (h) Lentiviral Particles: sc-39967-V and FGFR-5 shRNA (m) Lentiviral Particles: sc-39968-V.

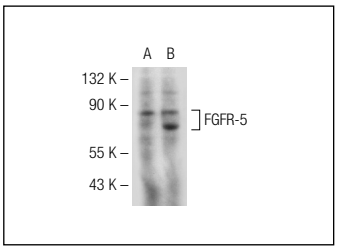
Molecular Weight of FGFR-5: 53 kDa.

Positive Controls: FGFR-5 (h3): 293T Lysate: sc-176162.

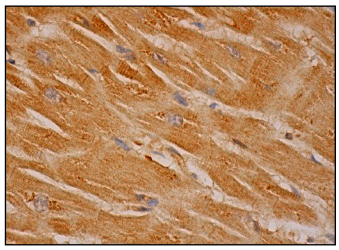
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



FGFR-5 (H-300): sc-50326. Western blot analysis of FGFR-5 expression in non-transfected: sc-117752 (**A**) and human FGFR-5 transfected: sc-176162 (**B**) 293T whole cell lysates.



FGFR-5 (H-300): sc-50326. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

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