SANTA CRUZ BIOTECHNOLOGY, INC.

FGFR-5 (m): 293T Lysate: sc-120249

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 (FGFR-1), the Bek receptor (FGFR-2) and FGFR-3-6. 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. 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.
5. Holtrich, U., et al. 1991. Two additional protein-tyrosine kinases expressed in human lung: fourth member of the fibroblast growth factor receptor family and an intracellular protein-tyrosine kinase. Proc. Natl. Acad. Sci. USA 88: 10411-10415.
6. 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.
7. Leelayuwat, C., et al. 1996. The primate MHC contains sequences related to the fibroblast growth factor receptor gene family. Tissue Antigens 48: 59-64.
8. Kim, I., et al. 2001. A novel fibroblast growth factor receptor-5 preferentially expressed in the pancreas. Biochim. Biophys. Acta 1518: 152-156.
9. Sleeman, M., et al. 2001. Identification of a new fibroblast growth factor receptor, FGFR-5. Gene 271: 171-82.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Fgfrl1 (mouse) mapping to 5 F.

PRODUCT

FGFR-5 (m): 293T Lysate represents a lysate of mouse FGFR-5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

FGFR-5 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FGFR-5 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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