



Fibroblast Growth Factor Receptor 3 (FGFR3)

Catalog number

F4305-18C

Supplier

United States Biological

Fibroblast growth factors (FGFs) are members of a large family of structurally related polypeptides (MW 17-38kD) that are potent physiological regulators of growth and differentiation for a wide variety of cells of mesodermal, ectodermal and endodermal origin. FGFs are substantially involved in normal development, wound healing and repair, angiogenesis, a variety of neurotrophic activities, and in hematopoiesis as well as in tissue remodelling and maintenance. They have also been implicated in pathological conditions such as tumorigenesis and metastasis. FGFRs are members of the tyrosine kinase family of growth factor receptors. They are glycosylated 110-150kD proteins consisting of an extracellular domain, a single transmembrane region and a cytoplasmic split tyrosine kinase domain, which is activated following ligand binding and receptor dimerization. FGFRs exhibit overlapping recognition and redundant specificity. Signal transduction by FGFRs requires dimerization or oligomerization and autophosphorylation of the receptors through their tyrosine kinase domain. FGFR3 is widely expressed in many fetal and adult human and animal tissues. The FGFR3 expression profile largely correlates with its tissue specific expression at the mRNA level.

Applications

Suitable for use in Western Blot and Immunohistochemistry. Other applications not tested.

Recommended Dilutions

Western Blot: 1:500 detects a band of ~110kD and 120kD using an extract of 293T cells transfected with the human FGFR-3 full length gene.

Immunohistochemistry (FFPE): 1:1000 stains protease digested, formalin fixed, paraffin embedded human and animal tissue sections by indirect immunoperoxidase staining. The epitope recognized is resistant to routine formalin fixation and paraffin embedding.

Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Synthetic peptide corresponding to aa359-372, AEEELVEADEAGSVK, from the extracellular region of human FGFR3, with a C-terminal lysine, conjugate with glutaraldehyde to KLH.

Formulation

Supplied as a liquid in PBS, pH 7.4, 1% BSA, 0.09% sodium azide.

Purity

Purified by immunoaffinity chromatography.

Specificity



Recognizes human FGFR3. Does not recognize human FGFR1 or FGFR2.

Product Type

Pab

Source

human

Isotype

IgG

Grade

Affinity Purified

Applications

IHC WB

Crossreactivity

Hu

Storage

-20°C

Reference

1. Baird, A., Fibroblast growth factors: activities and significance of non-neurotrophin neurotrophic growth factors. *Curr Opin Neurobiol* 4:78-86 (1994).
2. Givol, D. & Yayon, A. Complexity of FGF receptors: genetic basis for structural diversity and functional specificity. *FASEB J* 6: 3362-9 (1992).
3. Burgess, W.H. & Maciag, T. ,The heparin-binding (fibroblast) growth factor family of proteins. *Annu Rev Biochem* 58:575-606 (1989).
4. Klagsbrun, M. ,The fibroblast growth factor family: structural and biological properties. *Prog Growth Factor Res* 1:207-335 (1989).