

Recombinant Human FGFR1/CD331 Protein (His & GST Tag)

Catalog No. PKSH030406

Note: Centrifuge before opening to ensure complete recovery of vial contents.

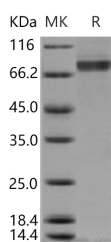
Description

Synonyms	bFGF-R-1;BFGFR;CD331;CEK;FGFBR;FGFR-1;FLG;FLT-2;FLT2;HBGFR;HH2;HRTFDS;KAL2;N-SAM;OGD
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Gly 311-Arg 731
Accession	NP_075594.1
Calculated Molecular Weight	75.0 kDa
Observed molecular weight	75 kDa
Tag	N-His-GST
Bioactivity	Not validated for activity

Properties

Purity	> 93 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as sterile solution of 50mM Tris, 100mM NaCl, pH 8.0, 20% glycerol, 0.3mM DTT
Reconstitution	Not Applicable

Data



> 93 % as determined by reducing SDS-PAGE.

Background

FGFR1; also known as CD331; belongs to the fibroblast growth factor receptor subfamily where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. Fibroblast growth factors (FGFs) (FGF1 - 10 and 16 - 23) are mitogenic signaling molecules that have roles in angiogenesis; wound healing; cell migration; neural outgrowth and embryonic development.

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FGFs bind heparan sulfate glycosaminoglycans; which facilitates dimerization (activation) of FGF receptors. FGFR1 is a full-length representative protein consists of an extracellular region; composed of three immunoglobulin-like domains; a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of FGFR1 interacts with fibroblast growth factors; setting in motion a cascade of downstream signals; ultimately influencing mitogenesis and differentiation. This particular family member binds both acidic and basic fibroblast growth factors and is involved in limb induction. CD331 can be detected in astrocytoma; neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines; however isoform 17; isoform 18 and isoform 19 are not detected in these cells. Defects in FGFR1 are a cause of Pfeiffer syndrome ;idiopathic hypogonadotropic hypogonadism; Kallmann syndrome type 2; osteoglophonic dysplasia and trigonocephaly non-syndromic.