Product Data Sheet

Product Name:	FGFR1 Human
Cat. No.:	GP22495
Batch No.:	1

Product Data

Purity	>98%	Source	Insect Cells.
Phycical Appearance	solid	Shipping Condition	Shipped at Room temp.

Synonyms	FGFR-1; bFGF-R; C-FGR; CD331; fms-related tyrosine kinase 2; Pfeiffer syndrome; CEK; FLG; FLT2; KAL2; BFGFR; FGFBR; HBGFR; FGFR1/FGFR1OP2 FUSION GENE; FGFR1/ZNF198 FUSION GENE; FLG FGFR1/BCR FUSION GENE; FLG protein; FMS-LIKE GENE; N-sam tyrosine kinase; basic fibroblast growth factor receptor 1.
Amino Acid Sequence	RPSPTLPEQAQPWGAPVEVESFLVHPGDLLQLRCRLRDDVQSINWLRDGVQL AESNRTRITGEEVEVQDSVPADSGLYACVTSSPSGSDTTYFSVNVSDALPSS EDDDDDDDSSSEEKETDNTKPNRMPVAPYWTSPEKMEKKLHAVPAAKTVKFK CPSSGTPNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVPSDKGNYT CIVENEYGSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYS DPQPHIQWLKHIEVNGSKIGPDNLPYVQILKTAGVNTTDKEMEVLHLRNVSF EDAGEYTCLAGNSIGLSHHSAWLTVLEALEERPAVMTSPLYLEDPRRASIEG RGDPEEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT CLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ QGNVFSCSVMHEALHNHYTQKSLSLSPGK
Solubility	It is recommended to reconstitute the lyophilized bFGF-R in sterile PBS not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.
Formulation	CD331 was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1xPBS.

Introduction

Fibroblast Growth Factors (FGFs) comprise a family of at least eighteen structurally

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realted proteins that are involved in a multitude of physiological and pathological cellular processes, including cell growth, differentation, angiogenesis, wound healing and tumorgenesis. The biological activities of the FGFs are mediated by a family if type I transmembrane tyrosine kinases which undergo dimerization and autophosphorylation after ligand binding. Four distinct genes encoding closely related FGF receptors, FGFR-1to -4 are known. Multiple forms of FGFR-1 to -3 are generated by alternative splicing of the mRNAs. A frequent splicing event involving FGFR-1 and -2 results in receptors containing all three Ig domains, referred to as the alpha isoform, or only IgII and IgIII, referred to as the ? isoform. Only the alpha isoform has been identified for FGFR-3 and FGFR-4. Additional splicing events for FGFR-1 to -3, involving the C-terminal half of the IgIII domain encoded by two mutually exclusive alternative exons, generate FGF receptors with alternative IgIII domains (IIIb and IIIc). A IIIa isoform which is a secreted FGF binding protein containing only the N-terminal half of the IgIII domain plus some intron sequences has also been reported for FGFR-1. Mutations in FGFR-1 to -3 have been found in patients with birth defects involving craniosynostosis.

Biological Activity

Determined by its ability to inhibit human FGF acidic-dependent proliferation on R1 cells. The ED50 for this effect is typically at 15.0-30.0 ng/ml.

Stability

Lyophilized FGFR1A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution FGFR1 should be stored at 4°C between 2-7 days and for future use below -18°C .For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

Soluble FGFR-1a (IIIc) Fc Chimera Human Recombinant fused with Xa cleavage site with the Fc part of human IgG1 produced in baculovirus is a heterodimeric, glycosylated, Polypeptide chain containing 601 amino acids and having a molecular mass of 170 kDa. The FGFR1 is purified by proprietary chromatographic techniques.