



Product Datasheet

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| Product Name | Fibroblast Growth Factor Receptor 1 Fc Chimera Human Recombinant |
| Cata No | CB500836 |
| Source | <i>Insect Cells</i> |
| 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. |

Description

Fibroblast Growth Factors (FGFs) comprise a family of at least eighteen structurally related proteins that are involved in a multitude of physiological and pathological cellular processes, including cell growth, differentiation, angiogenesis, wound healing and tumorigenesis. The biological activities of the FGFs are mediated by a family of type I transmembrane tyrosine kinases which undergo dimerization and autophosphorylation after ligand binding. Four distinct genes encoding closely related FGF receptors, FGFR-1 to -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 α isoform, or only IgII and IgIII, referred to as the β isoform. Only the α 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.

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 and having a molecular mass of 190 kDa. The FGFR1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity

Greater than 90.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

CD331 was lyophilized from a concentrated (1 mg/ml) sterile solution containing no additives.

Reconstitution

It is recommended to reconstitute the lyophilized bFGF-R in sterile PBS not less than 100 μ g/ml, which can then be further diluted to other aqueous

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solutions.

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 -18°C 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.

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