

Human FGFR-1 / Fc Chimera, soluble

Synonyms: FGFR1, CEK, FLG, OGD, FLT2, KAL2, BFGFR, CD331, FGFBR, FLT-2, HBGFR, N-SAM, FGFR-1, bFGF-R-1

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
10 µg	1390.952.010		
50 µg	1390.952.050		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant human soluble FGFR-1 alpha (IIIc) was fused via a Xa cleavage site with the Fc part of human IgG1. Human recombinant soluble FGFR-1 alpha (IIIc)/Fc is a disulfide-linked heterodimeric protein. In the reduced form the glycosylated subunits of sFGFR-1 alpha/human Fc chimera display a molecular mass of 80-85 kDa. 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 alpha isoform, or only of the Ig-like domains IgII and IgIII, referred to as the β 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.

- **Source** Insect cells
- **Purity** $\geq 90\%$ (SDS-PAGE, silver stained)

Biological Activity

Determined by its ability to inhibit human FGF basic-dependent proliferation on HUVE cells

Reconstitution

The lyophilized sFGFR-1/Fc is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than 50 µg/ml.

Amino Acid Sequence

RPSPTLPEQA QPWGAPVEVE SFLVHPGDL LQLRCRLRDDV QSINWLRDGV QLAESNRTRI TGEEVEVQDS
 VPADSGLYAC VTSSPSGSDT TYFSVNVSDA LPSSDDDDDD DSSSSEKET DNTKPNRMPV APYWTSPEKM
 EKKLHAVPAA KTVKFKCPSS GTPNPTLRWL KNGKEFKPDH RIGGYKVRYA TWSIIMDSVV PSDKGNITCI
 VENEYGSINH TYQLDVVERS PHRPILQAGL PANKTVALGS NVEFMCKVYS DPQPHIQWLK HIEVNGSKIG
 PDNLPYVQIL KTAGVNTTDK EMEVLHLRNV SFEDAGEYTC LAGNSIGLSH HSAWLTVLEA LEERPAVMTS
 PLYLEDPRRA SIEGRGDPEE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV
 SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI
 SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTPPP VLDSGDSFFL
 YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG K

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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