

## Human FGFR-4 / Fc Chimera (InCs)

Synonyms: FGFR4, TKF, JTK2, CD334

*PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING*

| Size  | Order #      | Lot # | Expiry Date |
|-------|--------------|-------|-------------|
| 10 µg | 1393.952.010 |       |             |
| 50 µg | 1393.952.050 |       |             |

Please enquire for bulk quantities and other vial sizes

### Description

Recombinant human soluble FGFR-4 was fused with the Fc-part of human IgG1. Human recombinant soluble FGFR-4/Fc is a disulfide-linked heterodimeric protein. In the reduced form the glycosylated subunits of sFGFR-4 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. All four genes for FGF-receptors encode proteins with an N-terminal signal peptide, three immunoglobulin (Ig)-like domains, an acid-box region containing a run of acidic residues between the Igl and IgII domains, a transmembrane domain and the split tyrosine-kinase domain. 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 beta 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. The complex patterns of expression of these receptors as well as the specificity of their interactions with the various FGF ligand family members are under investigation.

- **Source** Insect cells
- **Purity** ≥ 90 % (SDS-PAGE, silver stained)

### Biological Activity

Measured by its ability to bind recombinant human FGF-2 in a functional solid phase binding assay.

### Reconstitution

The lyophilized sFGFR-4/Fc is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than 50µg/ml.

### Amino Acid Sequence

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LEAEEVELE PCLAPSLEQQ EQELTVALGQ PVRLCCGRAE RGGHWYKEGS RLAPAGRVRG WRGRLEIASF
LPEDAGRYLC LARGSMIVLQ NLTLITGDSL TSSNDDDEPK SHRDPSNRHS YPQQAPYWTH PQRMEKKLHA
VPAGNTVKFR CPAAGNPTPT IRWLKDGQAF HGENRIGGIR LRHQHWSLVM ESVVPSDRGT YTCLVENAVG
SIRYNYLLDV LERSPHRPIL QAGLPANTTA VVGSDEVLLC KVYSDAQPHI QWLKHIVING SSGADGFPY
VQVLKTADIN SSEVEVLYLR NVSAEDAGEY TCLAGNSIGL SYQSAWLTVL PEEDPTWTAA APEARYTDTR
SDKTHTCPPC PAPELLGGPS VFLFPPKPKD TLMISRTPEV TCVVVDVSHE DPEVKFNWYV DGVEVHNAKT
KPREEQYNST YRVSVLTVL HQDWLNGKEY KCKVSNKALP APIEKTISKA KGQPREPQVY TLPPSREEMT
KNQVSLTCLV KGFYPSDIAV EWESNGQPEN NYKTTTPMLD SDGSFFLYSK LTVDKSRWQQ GNVFSCSVMH
EALHNHYTQK SLSLSPGK
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**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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