

## Recombinant Human sFGFR-4/Fc Chimera

 Catalog No.
 CRF019A
 Quantity:
 10 μg

 CRF019B
 50 μg

**Description:** Recombinant human soluble FGFR-4 was fused with the Fc part of human IgG<sub>1</sub>. Human

recombinant soluble FGFR-4/Fc is a disulfide-linked heterodimeric protein. The reduced

form of human FGFR- 4/Fc is a monomer with a calculated molecular mass of

approximately 65 kDa. As a result of glycosylation, the recombinant protein has a 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 tumorgenesis. 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, FGF R1 - 4, are known. All four genes for FGF Rs 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 IgI and IgII domains, a transmembrane domain and the split tyrosine-kinase domain. Multiple forms of FGF R1 - 3 are generated by alternative splicing of the mRNAs. A frequent splicing event involving FGF R1 and 2 results in receptors containing all three Ig domains, referred to as the a isoform, or only IgII and IgIII, referred to as the b isoform. Only the a isoform has been identified for FGF R3 and FGF R4. Additional splicing events for FGF R1 - 3, involving the C-terminal half of the IgIII domain encoded by two mutually exclusive alternative exons, generate FGF receptors with alternative IqIII 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 FGF R1. Mutations in FGF R1 - 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
Molecular Weight: 170 kDa

**Subunit:** Glycosylated dimer

**Purity:** > 90%, by SDS-PAGE and visualized by silver stain

**Endotoxin Level:** < 0.1 ng per µg of sFGFR-4

Stabilizer: none

Buffer: none

Formulation: Lyophilized

Biological Activity: Determined by its ability to inhibit human FGF basic-dependent proliferation on HUVE

cells. The ED<sub>50</sub> for this effect is typically at 15 - 30 ng/ml.

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**Reconstitution:** The lyophilized sFGFR-4/Fc is soluble in water and most aqueous buffers. The

lyophilized sFGFR-4/Fc should be reconstituted in PBS or medium to a concentration not

lower than 50 µg/ml.

**Stability:** Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted sFGFR-4/Fc should be stored in working aliquots at -20°C. Avoid repeated

freeze-thaw cycles.

**References:** Search <u>PubMed</u> (MEDLINE) for references to this product.

Please note: always centrifuge vials before opening.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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