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Recombinant Human sFGFR-2 alpha (IIIc)/Fc Chimera

Description: Recombinant human soluble FGFR-2 alpha (IIIc) was fused via a Xa cleavage site with the Fc part of human IgG₁. Human recombinant soluble FGFR-2 alpha (IIIc) is a disulfide-linked heterodimeric protein. In the reduced form the glycosylated subunits of sFGFR-2 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 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.

Source:	Insect cells
Molecular Weight:	170 kDa (dimer, glycosylated)
Purity:	> 90%, by SDS-PAGE and visualized by silver stain
Endotoxin level:	< 0.1 ng per µg of sFGF-R2 alpha
Stabilizer:	none
Buffer:	PBS
Formulation:	lyophilized

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.

Reconstitution: The lyophilized sFGFR-2 alpha (IIIc)/Fc is soluble in water and most aqueous buffers. The lyophilized sFGF-R2 alpha (IIIc)/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-2 alpha (IIIc)/Fc should be stored in working aliquots at -20°C. **Avoid repeated freeze-thaw cycles!**

Usage: sFGFR-2 alpha (IIIc)/Fc is offered for research use. Not for drug use. **Not for human use!**

Catalogue number: SFC-018	Size: 50 µg
	Range: 10-100 ng/ml

Literature: [Eisemann et al., Oncogene 6:1195, 1991; Givol et al., FASEB J 6:3362, 1992]