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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 IgG_1. 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 ß 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 ED_{50} 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: Lyophilised 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-017	**Size:**	10 µg
		Range:	10-100 ng/ml

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