

Human FGFR-2 (IIIb) / Fc Chimera, soluble

Synonyms: FGFR2, BEK, JWS, CEK3, CFD1, ECT1, KGFR, TK14, TK25, BFR-1, CD332, K-SAM

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
10 µg	1391.952.010		
50 µg	1391.952.050		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant human soluble FGFR-2 (IIIb) was fused via a Xa cleavage site with the Fc part of human IgG1. Human recombinant soluble FGFR-2 (IIIb) is a disulfide-linked homodimeric protein. In the reduced form the glycosylated subunits of sFGFR-2 (IIIb)/human Fc chimera display a molecular mass of about 90 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
- **Purity** ≥ 90 % (SDS-PAGE, silver stained)

Biological Activity

(1) The activity of sFGFR-2(IIIb)/Fc was determined by its ability to inhibit the FGF10-induced proliferation of 4MBr-5 cells. (2) Measured by its binding ability in a functional ELISA. Recombinant human soluble FGFR-2(IIIb)/Fc Chimera bind to immobilized recombinant human FGF-10 (Catalog #100-022).

Reconstitution

The lyophilized sFGFR-2(IIIb)/Fc is soluble in water and most aqueous buffers and should be reconstituted to a concentration not lower than 50µg/ml.

Amino Acid Sequence

RPSFSLVEDT TLEPEEPPTK YQISQPEVYV AAPGESLEVR CLLKDAAVIS WTKDGVHLGP NNRTVLIGEY
 LQIKGATPRD SGLYACTASR TVDSETWYFM VNVTDAISSG DDEDDTDGAE DFVSENSNKK ROPYWTNTEK
 MEKRLHAVPA ANTVKFRCPA GGNPMPTMRW LKNGKEFKQE HRIGGYKVRN QHWSLIMESV VPSDKGNYTC
 VVENEYGSIN HTYHLDVVER SPHRPILQAG LPANASTVVG GDVEFVCKVY SDAQPHIQWI KHVEKNGSKY
 GPDGLPYLKV LKHSGINSSN AEVLALFNVT EADAGEYICK VSNYIGQANQ SAWLTVLPKQ QAPGREKEIT
 ASPDYLEDPR RASIEGRGDP EEPKSCDKTH TCPPCPAPEL LGGPSVFLFP PKPKDTLMIS RTPEVTCVVV
 DVSHEDPEVK FNWYVDGVEV HNAKTKPREE QYNSTYRVVS VLTVLHQDWL NGKEYKCKVS NKALPAPIEK
 TISKAKQPR EPQVYTLPPS RDELTKNQVS LTCLVKGFYP SDIAVEWESN GQPENNYKTT PPVLDSGDSF
 FLYSKLTVDK SRWQQGNVFS CSVMHEALHN HYTQKSLSL S PGK

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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