

32-20607: Recombinant Human FGFR1a (IIIc) Fc(Discontinued)

Reactivity : Human, Mouse

Alternative Name : Fibroblast Growth Factor Receptor 1 alpha, BFGFR

Description

Source:CHO cells

The FGF family plays a central role during prenatal development and postnatal growth, and the regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. The FGF ligands bind to a family of type I transmembrane tyrosine kinase receptors, which leads to dimerization and activation by sequential autophosphorylation of specific tyrosine residues. Four genes encoding structurally related FGF receptors (FGFR-1 to -4) are known. Alternative splicing of the mRNAs generates numerous forms of FGFR-1 to -3. Alternate forms of FGF receptors can exhibit different specificities with respect to ligand binding. For example, the form designated as FGFR1a (IIc) interacts predominantly with FGF-acidic (FGF1) and FGF-basic (FGF2). 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). Recombinant Human FGFR1a (IIIc) is a 65.2 kDa protein containing 586 amino acids. Under reducing conditions, FGFR1a migrates between 100-110 kDa on SDS-PAGE gel.

Product Info

Amount : 10 µg / 50 µg

Purification : Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : RPSPTLPEQA QPWGAPVEVE SFLVHPGDL LQLRCRLRDDV QSINWLRDGV QLAESNRTRI
TGEEVEVQDS VPADSGLYAC VTSSPSGSDT TYFSVNVSDA LPSEDDDDDD DDSSSEEEKET
DNTKPNPVAP YWTSPEKMEK KLHAVPAAKT VKFKCPSSGT PNPTLRWLKN SKEFKPDHRI
GGYKVRATW SIIMDSVVPS DKGNYTCIVE NEYGSINHTY QLDVVVERSPH RPILQAGLPA
NKTVALGSNV EFMCKVYSDP QPHIQWLKHI EVNGSKIGPD NLPYVQILKT AGVNTTDKEM
EVLHLRNVSF EDAGEYTCLA GNSIGLSHHS AWLTVLEALE ERPAVMTSPL YLEGGPKSCD
KTHTCPPCPA PELLGGPSVF LFPPKPKDTL MISRTPEVTC VVVDVSHEDP EVKFNWYVDG
VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC KVSNAKALPAP IEKTISKAKG
QPREPQVYTL PPSRDELTKN QVSLTCLVKG FYPSDIAVEW ESNGQPENNY KTTTPVLDS
GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL SLSPGK

Application Note

Determined by a cell proliferation assay using Balb/c 3T3 cells. The expected ED_{50} is ≤ 0.1 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^7$ units/mg.