

Recombinant Human FGFR1a (IIIc) Fc
Catalog # PBG10112**Specification****Recombinant Human FGFR1a (IIIc) Fc - Product Information****Recombinant Human FGFR1a (IIIc) Fc - Additional Information****Description**

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 multiple 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.

Biological Activity

Assay #1: Determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors. The expected ED₅₀ is ≤ 0.5 ng/ml corresponding to a specific activity of $\geq 2 \times 10^6$ units/mg.

Assay #2: Determined by a cell proliferation assay using Balb/c 3T3 cells. The expected ED₅₀ is ≤ 0.1 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^7$ units/mg.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is <0.1 ng/ μ g of protein (<1 EU/ μ g).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human FGFR1a (IIIc) Fc is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human FGFR1a (IIIc) Fc - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human FGFR1a (IIIc) Fc - Images