

## TECHNICAL DATA SHEET

# Recombinant Human FGFR2a (IIIc) Fc (Carrier-free)

Catalog Number: 21-7105

RPx-Pro™ Recombinant Protein

## PRODUCT INFORMATION

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Recombinant Human FGFR2a (IIIc) Fc (Carrier-free)

### DESCRIPTION

The Fibroblast Growth Factor Receptor (FGFR) family is made up of four known closely related receptor tyrosine kinases, FGFR1 through 4. For FGFR1 through 3, alternative splicing results in numerous variants. One common splicing event results in the extracellular domain having all 3 immunoglobulin-like domains (alpha isoform) or only the II and III Ig domains (beta isoform). Additional variation in the IgIII domain allows for expression as IIIb or IIIc, again due to alternative splicing. Ligand binding results in dimerization and autophosphorylation of specific tyrosine residues. Variants may exhibit different ligand binding properties. Depending on the isoform, FGFR2 binds FGF-acidic, FGF-basic and keratinocyte growth factor ligands with high affinity.

### MOLECULAR MASS

Recombinant Human FGFR2a (IIIc) migrates between 100-110 kDa on SDS-PAGE gel under reducing conditions. It is a 65.6 kDa protein containing 589 amino acids.

### AMINO ACID SEQUENCE

(Monomer) RPSFSLVEDT TLEPEEPPTK YQISQPEVYV AAPGESLEVR CLLKDAAVIS WTKDGVHLGP NNRTVLIGEY LQIKGATPRD SGLYACTASR TVDSETWYFM VNVTDAISSG DDEDDTDGAE DFVSENSNNK ROPYWTNTEK MEKRLHAVPA ANTVKFRCPA GGNPMPMTMRW LKNGKEFKQE HRIGGYKVRN QHWSLIMESV VPSDKGNYTC VVENEYGSIN HTYHLDVVER SPHRPILQAG LPANASTVVG GDVEFVCKVY SDAQPHIQWI KHVEKNGSKY GPDGLPYLKV LKAAGVNTTD KEIEVLYIRN VTFEDAGEYT CLAGNSIGIS FHSALWTVLP APGREKEITA SPDYLEGGPK SCDKTHTCP CPAPPELLGGP SVFLFPPKPK DTLMISRTPE VTCVWVDVSH EDPEVKFNWY VDGVEVHNAK TKPREEQYNS TYRVVSVLTV LHQDWLNGKE YKCKVSNKAL PAPIEKTISK AKGQPPEPQV YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA VEWESNGQPE NNYKTTTPVL DSDGSFFLYS KLTVDKSRWQ QGNVFCSSVM HEALHNHYTQ KSLSLSPGK

### SOURCE

CHO cells

### APPLICATIONS

Bioassay

### PURITY

95 %

### STORAGE

-20°C

### PROTEIN CONTENT

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

### ENDOTOXIN LEVEL

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

### AUTHENTICITY

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

### CROSS REACTIVITY

Mouse

### BIOACTIVITY

**Assay #1:** The expected ED<sub>50</sub>, determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors, is ≤ 0.5 ng/ml corresponding to a specific activity of ≥ 2 x 10<sup>6</sup> units/mg. **Assay #2:** The expected ED<sub>50</sub>, determined by a cell proliferation assay using Balb/c 3T3 cells, is ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 1 x 10<sup>7</sup> units/mg.

### RESEARCH AREAS

Angiogenesis & Cardiovascular, Cancer, Differentiation, FGF Superfamily, Inflammation, Neurobiology, Stem Cells, Wound Healing

### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

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