



### Synonym

FGF R3 (IIIb), FGF R3B, CD333

### Source

Human FGF R3 (IIIb), Fc Tag (FGB-H5259) is expressed from human 293 cells (HEK293). It contains AA Glu 23 - Gly 377 (Accession # [P22607-2](#)).

Predicted N-terminus: Glu 23

### Molecular Characterization

FGF R3 (IIIb)(Glu 23 - Gly 377) P22607-2	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 65.0 kDa. The protein migrates as 80-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

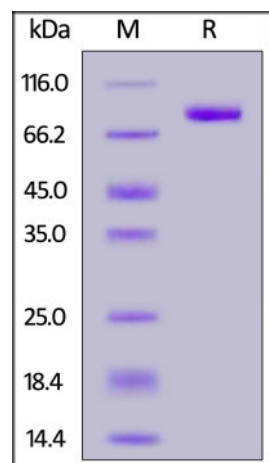
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

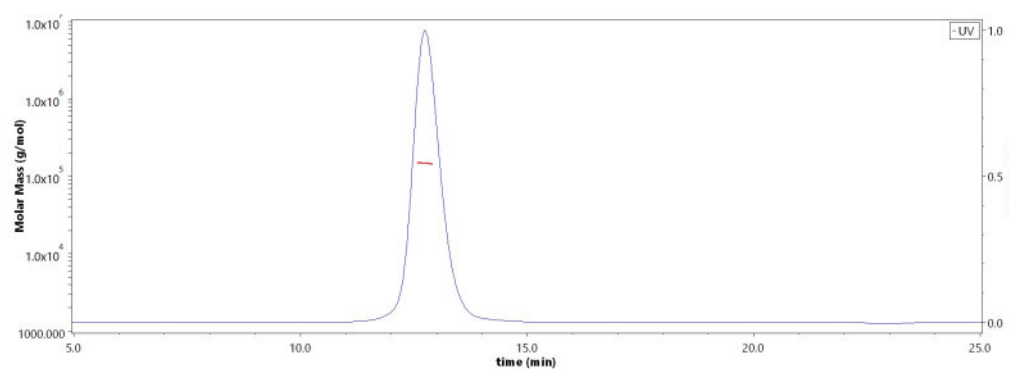
### SDS-PAGE



Human FGF R3 (IIIb), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-ELISA

### SEC-MALS

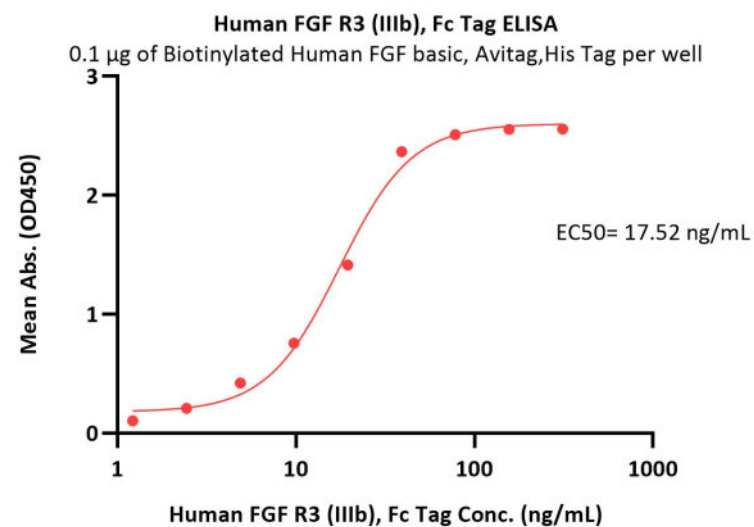
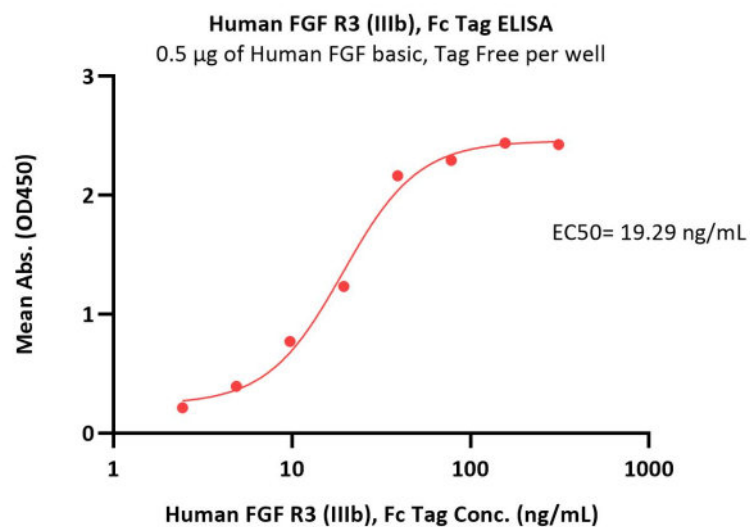


The purity of Human FGF R3 (IIIb), Fc Tag (Cat. No. FGB-H5259) is more than 90% and the molecular weight of this protein is around 132-162 kDa verified by SEC-MALS.

[Report](#)

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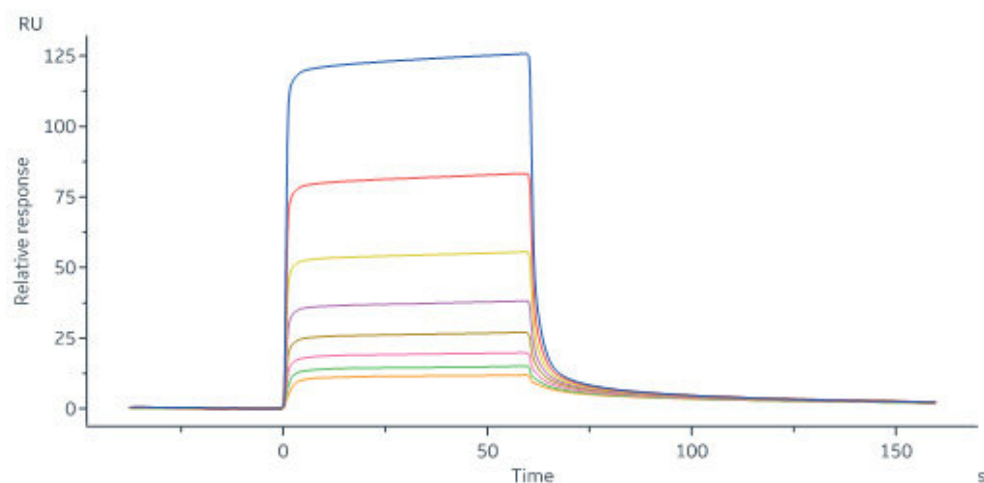




Immobilized Human FGF basic, premium grade (Cat. No. BFF-H4117) at 5 µg/mL (100 µL/well) can bind Human FGF R3 (IIIb), Fc Tag (Cat. No. FGB-H5259) with a linear range of 2-39 ng/mL (QC tested).

Immobilized Biotinylated Human FGF basic, Avitag, His Tag (Cat. No. FGC-H81E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Human FGF R3 (IIIb), Fc Tag (Cat. No. FGB-H5259) with a linear range of 1-39 ng/mL (Routinely tested).

**Bioactivity-SPR**



Human FGF R3 (IIIb), Fc Tag (Cat. No. FGB-H5259) immobilized on CM5 Chip can bind Human FGF acidic, Tag Free (Cat. No. AFF-H4116) with an affinity constant of 5.91 µM as determined in a SPR assay (Biacore 8K) (Routinely tested).

**Background**

Fibroblast growth factor receptors (FGFR) are transmembrane kinase proteins with growing importance in cancer biology given the frequency of molecular alterations and vast interface with multiple other signaling pathways. The FGFR3 gene is at the human chromosomal locus 4p16.3 also encodes two isoforms: FGF R3 (IIIb) FGF R3 (IIIc). Upregulated expression of FGFR3 protein is also found in a significant number of tumors. Additionally, FGFR3 has been found to trigger resistance to tamoxifen via the activation of the PLCγ signaling cascade.

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