

**Synonym**

FGFR1,BFGFR,CD331,CEK,FGFBR,FLG,HBGFR,N-SAM,FLT2,H2,KAL2,FLJ14326

**Source**

Human FGF R1, His Tag(FG1-H5223) is expressed from human 293 cells (HEK293). It contains AA Arg 22 - Ile 376 (Accession # [P11362-7](#)). Predicted N-terminus: Arg 22

**Molecular Characterization**

FGF R1(Arg 22 - Ile 376)  
P11362-7 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 41.2 kDa. The protein migrates as 60-90 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.

**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.*

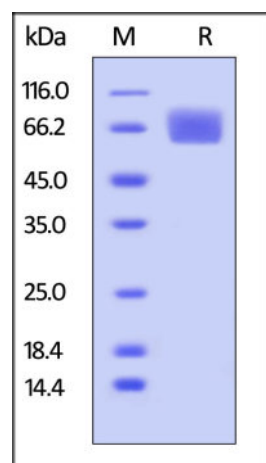
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

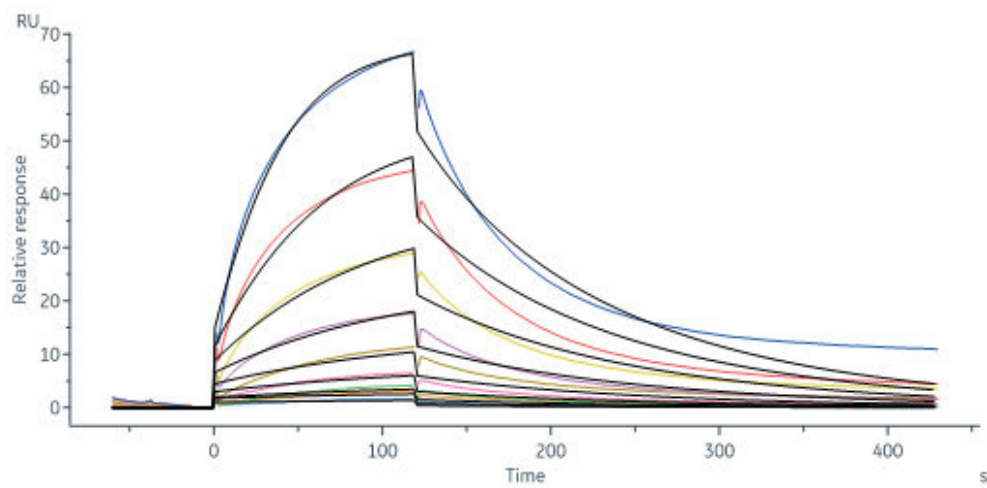
This product is stable after storage at:

- -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 R1, His 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-SPR**



Human FGF R1, His Tag (Cat. No. FG1-H5223) captured on CM5 chip via anti-His antibody can bind Human FGF acidic, Tag Free (Cat. No. AFF-H4116) with an affinity constant of 55.9 nM as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

Fibroblast growth factor receptor 1 (FGFR1) is also known as basic fibroblast growth factor receptor 1 (BFGFR1), FMS-like tyrosine kinase, CD331, and is a receptor tyrosine kinase whose ligands are specific members of the fibroblast growth factor family. This protein is one of several fibroblast growth factor receptors, which are related proteins that are involved in important processes such as cell division, regulation of cell growth and maturation, formation of blood vessels, wound healing, and embryonic development. The FGFR1 protein spans the cell membrane, so that one end of the protein remains inside the cell and the other end projects from the outer surface of the cell. This positioning allows the FGFR1 protein to interact with specific growth factors outside the cell and to receive signals that help the cell respond to its environment. When growth factors attach to the FGFR1 protein, the receptor triggers a cascade of chemical reactions inside the cell that instruct the cell to undergo certain changes, such as maturing to take on specialized functions. The FGFR1 protein is thought to play an important role in the development of the nervous system. This protein may also help regulate the growth of long bones, such as the large bones in the arms and legs.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.