

## Recombinant Human FGF1 protein

**Cat. No.** FGF1-322H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human FGF1 (Phe16-Asp155) protein carried no tag and was expressed in E.coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Phe16-Asp155
<b>Description</b>	Heparin-binding growth factor 1 is a protein that in humans is encoded by the FGF1 gene. The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF acidic is a potent growth factor for fibroblasts and endothelial cells. FGF acidic is involved in wound repair, angiogenesis, and development. FGF acidic is secreted from cells via an endoplasmic reticulum/Golgi independent mechanism. The ability of FGF acidic to bind to heparin sulfate is required for its ability to interact with FGF receptors and induce signaling. There are four distinct FGF receptors and each has multiple splice variants. FGF acidic binds with high affinity to many, but not all, FGFRs. Signaling cascades activated through FGF basic binding to FGFR include the ras-raf-MAPK, PLC $\gamma$ /PKC, and PI3K/Akt pathways.
<b>Predicted N Terminal</b>	Phe16
<b>Form</b>	Lyophilized from 0.22 $\mu$ m filtered solution in PBS, pH7.4, 10% trehalose.
<b>Molecular Mass</b>	The protein has a calculated MW of 15.8 kDa. The protein migrates as 15.8 kDa

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	under reducing (R) condition (SDS-PAGE).
<b>Endotoxin</b>	Less than 1.0 EU per µg by the LAL method.
<b>Purity</b>	>98% as determined by SDS-PAGE.
<b>Storage</b>	<p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <p>-20 to -70 centigrade for 12 months in lyophilized state;</p> <p>-70 centigrade for 3 months under sterile conditions after reconstitution.</p>
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">FGF1</a>
<b>Official Symbol</b>	<a href="#">FGF1</a>
<b>Synonyms</b>	FGF1; fibroblast growth factor 1 (acidic); FGFA; fibroblast growth factor 1; AFGF; ECGF; ECGF beta; ECGFA; ECGFB; endothelial cell growth factor; alpha; beta; FGF alpha; GLIO703; HBGF1; heparin binding growth factor 1; heparin-binding growth factor 1; beta-endothelial cell growth factor; endothelial cell growth factor, beta; endothelial cell growth factor, alpha; FGF-1; HBGF-1; ECGF-beta; FGF-alpha
<b>Gene ID</b>	<a href="#">2246</a>
<b>mRNA Refseq</b>	<a href="#">NM_000800</a>

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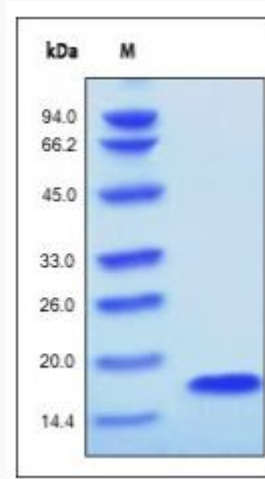
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**Protein Refseq** NP\_000791

**MIM** 131220

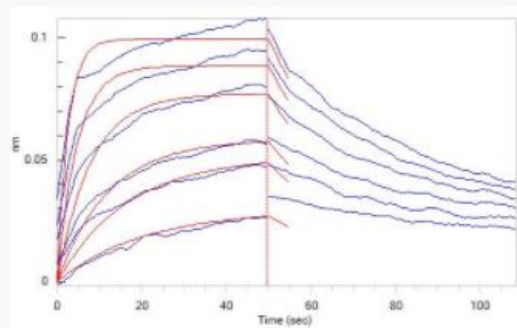
**UniProt ID** P05230

**SDS-PAGE of FGF1-322H**



Human FGF acidic, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 98%.

**Bioactivity-BLI of FGF1-322H**




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Loaded Human FGF R1, His Tag on HIS1K Biosensor, can bind Human FGF acidic, Tag Free with an affinity constant of 0.16  $\mu\text{M}$  as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

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