

Rev04  
Update: Mar,01,2022

**DATASHEET**

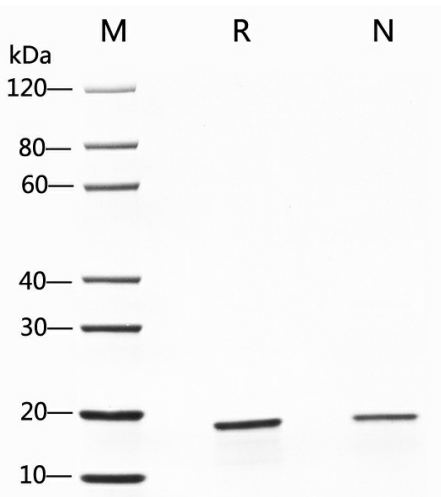
# FGF-basic (154aa), Human

Cat. No.: Z03116

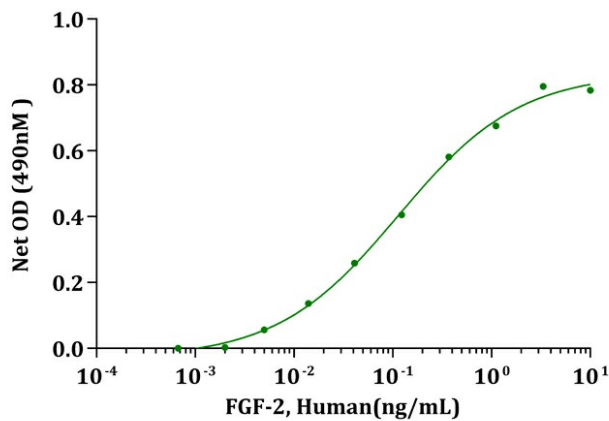
## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>FGF-basic (Ala135-Ser288) Accession # P09038</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 0.25 ng/ml, measured by the cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 4.0 × 10 <sup>6</sup> units/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~17.1 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Examples

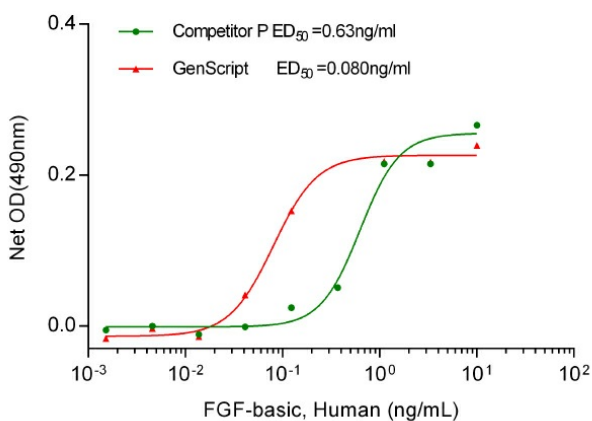


2  $\mu\text{g}$  of FGF-basic, Human (Cat. No. Z03116) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



### Biological Activity

FGF-basic, Human (Cat. No. Z03116) stimulates cell proliferation of Balb/3T3 cells. The  $\text{ED}_{50}$  for this effect is less than 0.25ng/mL.



GenScript product showed better activity compared to competitor P

## Background

**Target Background :** Fibroblast Growth Factor-basic (FGF-basic), also known as FGF-2, is a pleiotropic cytokine and one of the prototypic members of the heparin-binding FGF family. Like other FGF family members, bFGF has the  $\beta$  trefoil structure. In vivo, bFGF is produced by a variety of cells, including cardiomyocytes, fibroblasts, and vascular cells. bFGF regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. bFGF can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of bFGF can produce beneficial cardioprotection during acute heart injury.

**Synonyms :** Fibroblast Growth Factor-basic; FGF-2; BFGF; FGFB; HBGF-2; bFGF; Prostatropin

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**