

# Mouse / Rat aFGF / FGF1 Protein

Catalog Number: 50179-MNAE



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

FGF1

### Protein Construction:

A DNA sequence encoding the mature form of mouse / rat FGF1 (NP\_034327.1) (Phe16-Asp155) was expressed. Mouse and Rat FGF1 sequences are identical.

**Source:** Mouse, Rat

**Expression Host:** E. coli

## QC Testing

**Purity:** > 90 % as determined by SDS-PAGE

### Bio Activity:

Measured in a cell proliferation assay using Balb/c 3T3 mouse embryonic fibroblast cells. The ED<sub>50</sub> for this effect is 0.04-0.2 ng/mL.

### Endotoxin:

Please contact us for more information.

**Predicted N terminal:** Met

### Molecular Mass:

The recombinant mouse / rat FGF1 consisting of 141 amino acids and has a calculated molecular mass of 16 kDa as estimated in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile 50mM Na<sub>2</sub>SO<sub>4</sub>, 0.5mM DTT, 1mM EDTA, 20mM Tris, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

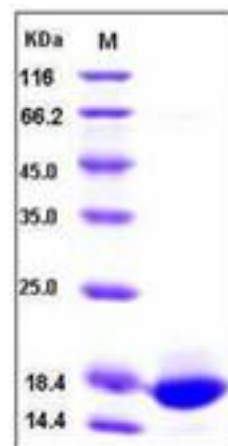
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

aFGF, also known as FGF1 and HBGF-1, is a member of the fibroblast growth factor family. The biological activity of aFGF protein is exerted through binding to four high affinity cell surface receptors (FGFR1&ndash;4), which results in receptor dimerization and transphosphorylation in the tyrosine kinase domain. aFGF protein shows a wide range of endocrine-like activities. As a multiple function growth factor, this protein is involved in embryo development and tissue repair. Additionally, this protein is considered to function in several important physiological and pathological processes, such as embryonic development, morphogenesis, angiogenesis, wound healing and atheromatosis, carcinogenesis, development, and invasion of cancer.

References

### References

1. Jaye M., et al., (1986), Human endothelial cell growth factor: cloning, nucleotide sequence, and chromosome localization. *Science* 233:541-545.
2. Mergia A., et al., (1989), Structural analysis of the gene for human acidic fibroblast growth factor. *Biochem. Biophys. Res. Commun.* 164:1121-1129.
3. Wang W.P., et al., (1989), Cloning of the gene coding for human class 1 heparin-binding growth factor and its expression in fetal tissues. *Mol. Cell. Biol.* 9:2387-2395.