

Mouse / Rat aFGF / FGF1 Protein

Catalog Number: 50179-MNAE



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

Dffrx, Fam, Fgf-1, Fgfa, Fgf1

Protein Construction:

A DNA sequence encoding the mature form of mouse FGF1 (NP_034327.1) (Phe16-Asp155) was expressed. Mouse and Rat FGF1 sequences are identical.

Source: Mouse

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 fibroblasts.

The ED50 for this effect is typically 0.05-0.25 ng/mL in the presence of 10 µg/ml heparin.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant mouse 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 Na2SO4, 0.5mM DTT, 1mM EDTA, 20mM Tris, pH 7.5

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

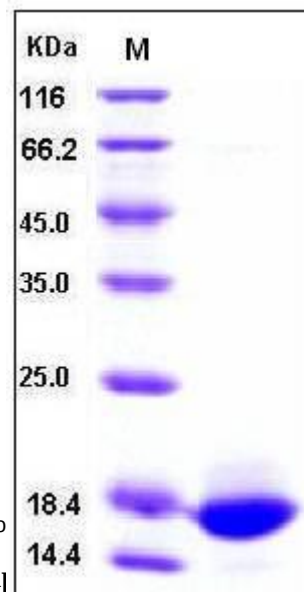
Usage Guide

Storage:

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution

the products.

Protein Description

aFGF (Acidic fibroblast growth factor), also known as FGF1 (Fibroblast growth factor 1), FGF-acidic and HBGF-1 (Heparin-binding growth factor 1), is a member of the fibroblast growth factor (FGF) family. It is a powerful mitogen exhibiting strong action on numerous different cell types. FGF1 protein plays a role in various stages of development and morphogenesis, as well as in angiogenesis and wound healing processes. aFGF protein binds to cell surface receptors with high affinity with the prerequisite association of aFGF with heparan sulfate. The aFGF gene is a repressed target of p53. It inhibits both p53-dependent apoptosis and cell growth arrest via an intracrine pathway. Accordingly, aFGF and p53 pathways may interact in the cell to determine cell fate.

References

1. Rothlein, R. et al., 1986, Journal of Immunology. 137 (4): 1270-1274.
2. Yang, L. et al., 2005, Blood 106 (2): 584-592.
3. Gorczynski, R.M., 2005, Curr. Opin. Invest. Drugs. 6:483-487.
4. Frijns, C.J. et al., 2002, Stroke 33 (8): 2115-2122.
5. Bella, J. et al., 1998, Proc. Natl. Acad. Sci. U.S.A. 95 (8): 4140-4145.

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