Stable-Basic Fibroblast Growth factor

recombinant, Human
expressed in E.Coli

Catalog Number

GR 004-010 (10ug)

GR 004-050 (50ug)

GR 004-200 (200ug)

Storage Temperature 2 ~ 8°C

Precautions
For *In Vitro* Use Only

Product Description

St-bFGF was modified to remain active at room temperature.

Fibroblast Growth Factor, basic (syn.; FGF-2; HBGF-2) is 55% homology to FGF acidic and prototypic member of the fibroblast growth factor family. Fibroblast growth factor 2, also known as basic fibroblast growth factor (bFGF) and FGF-β, is a growth factor and signaling protein encoded by the FGF2 gene. It binds to specific fibroblast growth factor receptor (FGFR) proteins, a family of closely related molecules, and through them has a wide range of mitotic and cell survival activities, exerting a variety of biological effects including cell proliferation, differentiation, survival and apoptosis.

It supports the maintenance of undifferentiated human pluripotent stem cells, stimulates human pluripotent stem cells to form neural rosettes, and improves proliferation of human mesenchymal stem cells and enhances chondrogenic differentiation. Also it supports the maintenance of undifferentiated human pluripotent stem cells, stimulates human pluripotent stem cells to form neural rosettes, and improves proliferation of human mesenchymal stem cells and enhances chondrogenic differentiation

Product Information

Alternative Names :
Basic fibroblast growth factor, bFGF, FGF-β, FGF2, HBGF-2

Species : Human

Source : E. Coli

Predicted Molecular Mass : 16.4 kDa

Amino Acid Sequence :

Formulation :
Lyophilized from a sterile-filtered aqueous solution containing 20mM Citric acid, pH 5.0.

Product Specifications

Biological activity :
The EC_{50} ≤ 1.0 ng/mL as determined by a cell proliferation assay using BALB/ 3T3 cells.

Purity :
≥ 95% purity by SDS-PAGE

Endotoxin :
≤ 0.5 EU/mg protein by LAL(Limulus amebocyte lysate) analysis method.

Preparation and Storage

Storage :
Store at 2 °C to 8 °C.

Stability :
Stable as supplied for 12 months from date of receipt.

Preparation :
Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex

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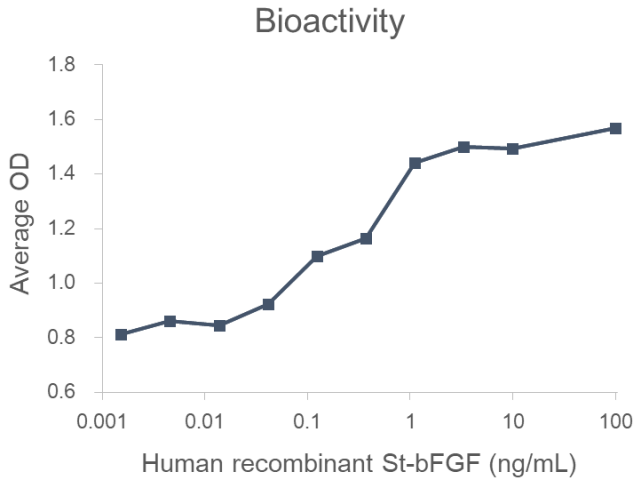
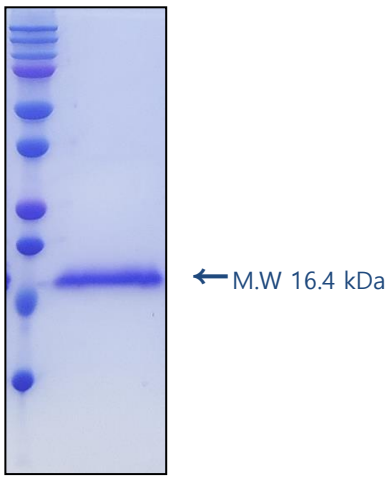
DATA

(A) The biological activity of Human Recombinant St-bFGF was tested by its ability to promote the proliferation of BALB/c 3T3 cells. Cell proliferation was measured using a fluorometric assay method. The EC50 is defined as the effective concentration of the growth factor at which cell proliferation is at 50% of maximum. The EC50 in the under example is 0.33 ng/mL.
(B) Human Recombinant St-bFGF was resolved with SDS-PAGE under and visualized by Coomassie Blue staining. Human Recombinant St-bFGF has a predicted molecular mass of 16.4 kDa.

(A)



(B)



SDS-PAGE analysis of St-bFGF

References

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