



User Manual

Fibroblast Growth Factor-basic (bFGF) (Rat)

Cat. No. REGFP-06012

Description:

Fibroblast Growth Factor-basic (bFGF) is one of 23 known members of the FGF family. Proteins of this family play a central role during prenatal development and postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-basic is a non-glycosylated heparin binding growth factor that is expressed in the brain, pituitary, kidney, retina, bone, testis, adrenal gland liver, monocytes, epithelial cells and endothelial cells. FGF-basic signals through FGFR 1b, 1c, 2c, 3c and 4.

Source:

Escherichia coli

Unit:

50 µg

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working

aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 16.3 kDa, a single non-glycosylated polypeptide chain containing 146 amino acids.

Endotoxin:

Less than 1 EU/μg of bFGF as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 1.8 ng/mL, corresponding to a specific activity of $> 5.6 \times 10^5$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH
VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES
NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS

Purity:

> 98% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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