

Datasheet

Fibroblast Growth Factor 2

Murine recombinant

Product	Description	Catalogue-No.	Size
FGF-2	Basic fibroblast growth factor (FGF-2), murine recombinant	P-3860001 P-3860002	10 µg 50 µg

Product description

Synonyms: basic FGF, FGF-2, FGF-b

Basic fibroblast growth factor (FGF-2) is a member of the fibroblast growth factor family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. Three alternatively spliced variants encoding different isoforms have been described. The heparin-binding growth factors are angiogenic agents in vivo and are potent mitogens for a variety of cell types in vitro. There are differences in the tissue distribution and concentration of these 2 growth factors. FGF-2 acts as a mitogen for a variety of mesoderm- and neuro-ectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. Murine recombinant FGF-2 produced in E. coli is a single, non-glycosylated, polypeptide chain containing 146 amino acids and having a molecular mass of 16.3 kDa. The FGF-2 is purified by proprietary chromatographic techniques.

Solubility and storage conditions

It is recommended to reconstitute the lyophilized FGF-2 in sterile distilled water at a concentration not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Lyophilized FGF-2 although stable at room temperature for 3 weeks should be stored desiccated below -20° C. Upon reconstitution FGF-2 should be stored at 2-8° C up to 7 days and for future use below -20° C. For long term storage it is recommended to add a carrier protein (e.g. 0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Composition

Sterile filtered white lyophilized (freeze-dried) powder. The protein was lyophilized from 5 mM Na₂PO₄, pH 7.5 and 50 mM NaCl.

Purity: > 95.0% as determined by a: analysis by RP-HPLC, b: analysis by SDS-PAGE. Protein quantitation was carried by UV spectroscopy at 280 nm using the absorbency value of 0.885 as the extinction coefficient for a 0.1% (1 mg/ml) solution and analysis by RP-HPLC, using a calibrated solution of FGF-2 as a reference.

Biological activity: The activity as calculated by the dose-dependent proliferation of BALB/3T3 cells was found to be 0.10 - 0.16 ng/ml.

Amino acid sequence: MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECVFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS.

Suitability

FOR RESEARCH USE ONLY!

Not approved for human or animal diagnostic or therapeutic procedures.

Technical Support

Additional information will be available on our website: www.pan-biotech.com

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.