

**Datasheet**

**Fibroblast Growth Factor 2**

**Human recombinant**

Product	Description	Catalogue-No.	Size
FGF-2	Basic fibroblast growth factor (FGF-2), human recombinant	CB-1102024 CB-1102021 CB-1102023	10 µg 50 µg 1 mg

**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 possess mitogenic and cell survival activities. They are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. The protein functions as a modifier of endothelial cell migration and as an angiogenic factor. 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. 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.

Human recombinant FGF-2 is produced in E. coli as a single, non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17,353 Dalton. 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 a concentrated (1mg/ml) solution in PBS, pH 7.4.

Purity: > 96.0% 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 0.8511 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 ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by 3H-thymidine uptake) is <0.5 ng/ml, corresponding to a specific activity of 2,000,000 U/mg.

Amino acid sequence:

MAAGSITTLP ALPEDGGSGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD GVREKSDPHI KLQLQAEERG VVSIKGVCAN RYLAMKEDGR LLASKCVTDE CFFFERLESN NYNTYRSRKY TSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS.

**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](http://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](mailto:info@pan-biotech.com)) or phone +49-8543-601630.

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