

Recombinant Human Fibroblast Growth Factor-basic (rh FGF-b / FGF-2)

Synonyms: Prostatropin

Introduction: Basic fibroblast growth factor is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-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. There are differences in the tissue distribution and concentration of these 2 growth factors.

Description: Recombinant human FGF-b produced in E.Coli is a single, non-glycosylated polypeptide chain containing 154 amino acids and having a molecular mass of 16.5 kDa. The rh FGF-b is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in 25 mM sodium phosphate, 200 mM NaCl, pH 7.6
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized FGF-basic in sterile H₂O, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh FGF-basic although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh FGF-basic should be stored below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-page.

AminoAcid Sequence: MAAGSITLTP ALPEDGGSGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD
GVREKSDPHI KLQLQAEERG VVSIKGVCAN RYLAMKEDGR LLASKCVTDE CFFFERLESN
NYNTYRSRKY TSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS

Endotoxin level: The endotoxin level is less than 1 EU / µg determined by LAL method

Biological Activity: Tested by dose dependent stimulation of proliferation of murine 3T3 fibroblast cell line the biological activity of rh FGF-2 is 1x10⁷ IU/mg

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11343623
<i>medium</i>	50 µg	Cat.N°	11343625
<i>large</i>	250 µg	Cat.N°	11343627
<i>x-large</i>	1000 µg	Cat.N°	11343628

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Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com