

Recombinant Mouse Fibroblast Growth Factor-basic (rm FGF-b / FGF-2)

Synonyms: HBGH-2, HBGF-2, Prostatropin.

Introduction: FGF-basic is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. FGF-b has been implicated in diverse biological processes, such as limb and nervous system development, wound healing and tumor growth. The mRNA for this gene contains multiple polyadenylation sites and is alternatively translated from AUG and non-AUG (CUG) initiation codons resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of FGF-b. 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 mouse FGF-basic (FGF-2) produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 145 amino acids and having a molecular mass of 16320 Dalton. The rm FGF-basic 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 acetate, 200 mM NaCl, pH 7.5
The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

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

Stability: Lyophilized rm FGF-basic although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm FGF-basic should be stored at 4° C between 2-7 days and for future use 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.

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

Amino acid Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Pro-Ala-Leu-Pro-Glu.

Biological Activity: The ED₅₀, calculated by the dose-dependant proliferation of BALB/3T3 cells is < 0.5 ng/ml.

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°	12343623
<i>medium</i>	50 µg	Cat.N°	12343625
<i>large</i>	250 µg	Cat.N°	12343627
<i>x-large</i>	1000 µg	Cat.N°	12343628

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