

Recombinant Mouse Fibroblast Growth Factor-18 (rm FGF-18)

Synonyms: HBGF-8, AIGF.

Introduction: Fibroblast growth factor 18 (FGF18) is a member of the large FGF family which has at least 23 members. FGF18 is a heparin binding growth factor with a core 120 amino acid FGF domain which allows for a common tertiary structure. FGFs are expressed in the course of the embryonic development and in restricted adult tissues. FGF-18 is an indispensable regulator of long bone and calvarial development. FGF-18 signals via FGFR 1c, 2c, 3c, and 4.

Description: rm Fibroblast Growth Factor-18 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 180 amino acids and having a molecular mass of 21 kDa. The rm FGF-18 is purified by chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm FGF-18 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm FGF-18, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm FGF-18 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 RP-HPLC and by SDS-PAGE.

Amino Acid Sequence: EENVDFRIHV ENQTRARDDV SRKQLRLYQL YSRTSGKHIQ VLGRISARG EDGDKYAQLL VETDTFGSQV RIKGKETEFY LCMNRKGKLV GKPDGTSKEC VFIEKVLENN YTALMSAKYS GWYVGFTKKG RPRKGPKTRE NQQDVHFMKR YPKGQALQK PFKYTTVTKR SRRIRPTHPG.

Biological Activity: Determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF-receptors the ED50 is ≤ 0.5ng/ml, corresponding to a specific activity of ≥ 2.0 ×10⁶ units/mg.

This material is offered for **research 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>	5 µg	Cat.N°	12344970
<i>medium</i>	25 µg	Cat.N°	12344974

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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