

Active Recombinant Rat Fgf18 Protein (172 aa)

Cat. No. Fgf18-416F **Lot. No.** (See product label)

SPECIFICATION

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|-------------------------|---|
| Product Overview | Recombinant rat Fibroblast Growth Factor 18 (rrFGF-18) produced in E. coli is a single non-glycosylated polypeptide chain containing of 172 amino acids. A fully biologically active molecule, rrFGF-18 has a molecular mass of 20.1 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques. |
| Species | Rat |
| Source | E.coli |
| ProteinLength | 172 |
| Description | Fibroblast Growth Factor 18 (FGF-18) is a pleiotropic cytokine belonging to the heparin-binding FGF family, which has 23 different members. Structurally, FGF-18 is closely related to FGF-8 and FGF-17. Like other FGFs, FGF-18 can bind to different FGF receptors in vivo. FGF-18 is expressed in various tissues and has multiple functions: during long bone growth, FGF-18 is expressed in perichondrium and developing joints, and regulates bone formation by inhibiting chondrocyte proliferation and differentiation; FGF-18 knock-out mice survive embryonic development, but exhibit skeletal abnormalities and die in the early neonatal period. FGF-18 also induces ectopic cartilage formation in the lung, and alters the morphology of the pulmonary mesenchyma. |
| Form | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Bio-activity | ED50 < 0.5 |

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|-----------------------|--|
| | µg/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 2 × 10 ³ units/mg. |
| Molecular Mass | 20.1 kDa, observed by non-reducing SDS-PAGE. |
| AA Sequence | EENVDFRIHVENQTRARDDVSRKQLRLYQLYSRTSGKHIQVLGRRISARGEDGDKY AQLLVETDTFGSQVRIKGGKETFYLCMNRKGLVGPDPGTSKECVFIEKVLNNYTA LMSAKYSGWYVGFTKKGPRKGPKTRENQQDVHFMKRYPKGQTELQKPFKYTTVT KRSR |
| Endotoxin | < 0.2 EU/µg, determined by LAL method. |
| Purity | > 95% as analyzed by SDS-PAGE and HPLC. |
| Storage | Lyophilized recombinant rat Fibroblast Growth Factor 18 (rrFGF-18) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rrFGF-18 remains stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade. |
| Storage Buffer | Lyophilized after extensive dialysis against PBS. |
| Reconstitution | Reconstituted in ddH ₂ O at 100 µg/mL. |

GENE INFORMATION

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|------------------------|---|
| Gene Name | Fgf18 fibroblast growth factor 18 [Rattus norvegicus] |
| Official Symbol | Fgf18 |
| Synonyms | FGF18; fibroblast growth factor 18; FGF-18; |
| Gene ID | 29369 |

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mRNA Refseq [NM_019199](#)

Protein Refseq [NP_062072](#)

UniProt ID [O88182](#)

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