

## Fgf18

## **Recombinant Rat Fibroblast Growth Factor-18**

Catalog No. CS503A Quantity: 5 μg

CS503B 25 μg CS503C 1 mg

Alternate Names: FGF-18

**Description:** FGF-18 is encoded by the FGF18 gene in rats. By phylogenetic analysis and gene

location analysis, FGF-18 belongs to the FGF-8 subfamily, which has three members: FGF-8, FGF-17 and FGF-18. Using FGF knockout mice models, memberss of this subfamily were tested and found to have crucial roles in embryological development. FGF-18—/—mice have decreased expression of osteogenic markers and delayed longbone ossification. FGF-18 also plays a significant role in lung development and has an anabolic effect on cartilage formation. Additionally, it has been shown *in vitro* that this protein is able to induce neurite outgrowth in PC12 cells. Rat FGF-18 shares 98% amino

acid sequence identity with human.

Recombinant Rat FGF-18 is a single non-glycosylated polypeptide chain containing 180

amino acids.

 Gene ID:
 29369

 Source:
 E. coli

 Molecular Weight:
 21.0 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, + 500 mM NaCl.

Purity: >95 % by SDS-PAGE and HPLC analyses. Endotoxin Level: <1 EU/µg as determined by LAL method.

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> determined by thymidine

uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml.

**Specific Activity:**  $> 2.0 \times 10^6 \text{ IU/mg}.$ 

Amino Acid Sequence: EENVDFRIHV ENQTRARDDV SRKQLRLYQL YSRTSGKHIQ VLGRRISARG

EDGDKYAQLL VETDTFGSQV RIKGKETEFY LCMNRKGKLV GKPDGTSKEC VFIEKVLENN YTALMSAKYS GWYVGFTKKG RPRKGPKTRE NQQDVHFMKR

YPKGQTELQK PFKYTTVTKR SRRIRPTHPG

**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a

concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered

solutions.

**Storage & Stability:** This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for

long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -4°C. For maximal stability, apportion the reconstituted preparation into working aliquots

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and store at -20°C to -80°C. Avoid repeated freeze/thaw cycles.

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