

Fgf18

Recombinant Mouse Fibroblast Growth Factor-18

Catalog No.	CS491A	Quantity:	5 µg
	CS491B		25 µg
	CS491C		1 mg

Description: FGF-18 is encoded by the FGF18 gene. By phylogenetic analysis and gene location analysis, FGF-18 belongs in the FGF-8 subfamily which has three members: FGF-8, FGF-17 and FGF-18. Using FGF knockout mice model, members of this subfamily were tested and found to have critical roles in embryonic development. FGF-18^{-/-} mice have decreased expression of osteogenic markers and delayed long-bone ossification. FGF-18 has been shown *in vitro* to induce neurite outgrowth in PC12 cells. In addition, it also has a significant role in lung development and has an anabolic effect on cartilage formation.

Recombinant Mouse Fibroblast Growth Factor-18 is a single non-glycosylated polypeptide chain containing 180 amino acids.

Gene ID: 14172

Source: *E. coli*

Molecular Weight: 21.1 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 ED₅₀ determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml.

Specific Activity: >2.0 × 10⁶ IU/mg in the presence of 1 µg/ml of heparin.

Amino Acid Sequence: EENVDFRIHV ENQTRARDDV SRKQLRLYQL YSRTSGKHIQ VLGRRISARG
EDGDKYAQLL VETDTFGSQV RIKGKETEFY LCMNRKGKLV GKPDGTSKEC
VFIEKVLNEN YTALMSAKYS GWYVGFTHKG RPRKGPKTRE NQQDVHFMKR
YPKGQAEELQK 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 and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

