

# Fibroblast Growth Factor-18, rat recombinant (rrFGF18)

Catalog No: 97596 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** Fibroblast growth factor 18, FGF-18, zFGF5, Fgf18, D130055P09Rik

#### **Background**

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

FGF-18 rat recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 180 amino acids and having a molecular mass of 21.0 kDa. FGF 18 rat is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized from a 0.2um filtered concentrated solution in PBS, pH 7.4.

# Solubility

It is recommended to reconstitute the lyophilized FGF 18 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized FGF 18, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF 18 rat should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

#### **Purity**

Greater than 95.0% as determined by SDS-PAGE and HPLC analyses.

# **Amino Acid Sequence**

EENVDFRIHV ENQTRARDDV SRKQLRLYQL YSRTSGKHIQ VLGRRISARG EDGDKYAQLL VETDTFGSQV RIKGKETEFY LCMNRKGKLV GKPDGTSKEC VFIEKVLENN YTALMSAKYS GWYVGFTKKG RPRKGPKTRE NQQDVHFMKR YPKGQTELQK PFKYTTVTKR SRRIRPTHPG

# **Activity**

The ED50 as determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF-receptors is 0.5 ng/ml, corresponding to a specific activity of  $2.0 \times 1,000,000 \text{ units/mg}$ .





# Usage

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