



## Technical Data Sheet

### Recombinant Human Fibroblast Growth Factor-18 (rHuFGF-18)

#### *Human Fibroblast Growth Factor-18*

Human FGF-18 is encoded by the FGF18 gene. By phylogenetic analysis and gene location analysis, FGF-18 is divided into FGF-8 subfamily which has three members FGF-8, FGF-17 and FGF-18. Using FGF knockout mice model, the numbers of this subfamily were testified that have crucial roles of in embryo development. FGF-18-/- mice have decreased expression of osteogenic markers and delayed long-bone ossification. FGF-18 has been shown in vitro that this protein is able to induce neurite outgrowth in PC12 cells. In addition, it also has significant roles in lung development and has an anabolic effect on cartilage formation.

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| Catalog Number:      | RC215-29   |
| Source:              | <i>Escherichia coli</i> .  |
| Molecular Weight:    | Approximately 21.1 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.  |
| Quantity:            | 5µg/25µg/1000µg  |
| AA Sequence:         | AEENVDFRIH VENQTRARDD VSRKQLRLYQ LYSRTSGKHI QVLGRRISAR<br>GEDGDKYAQL LVETDTFGSQ VRIKKGTEF YLCMNRKGKL VGKPDGTSKE CVFIEKVLN<br>NYTALMSAKY SGWYVGFTKK GRPRKGPKTR ENQQDVHFMK RYPKGQPELO<br>KPFKYTTVTK RSRIRPHTHP A   |
| Purity:              | > 95 % by SDS-PAGE and HPLC analyses.  |
| Biological Activity: | Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg.  |
| Physical Appearance: | Sterile Filtered White lyophilized (freeze-dried) powder.  |
| Formulation:         | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.   |
| Endotoxin:           | Less than 1EU/µg of rHuFGF-18 as determined by LAL method.   |
| Reconstitution:      | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| Storage:             | This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for   |



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long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.

Usage:

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