

FGF-18, Human

Cat. No.: Z02937-5

Size: 5.0 ug

Synonyms: zFGF5, FGF1

Description:

Fibroblast growth factor 18 (FGF18) is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth, and invasion. It has been shown in vitro that this protein is able to induce neurite outgrowth in PC12 cells. Studies of the similar proteins in mouse and chick suggested that this protein is a pleiotropic growth factor that stimulates proliferation in a number of tissues, most notably the liver and small intestine.

Amino Acid Sequence:

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00001 AEENVDFRIH VENQTRARDD VSRKQLRLYQ LYSRTSGKHI
00041 QVLGRRISAR GEDGDKYAQL LVETDTFGSQ VRIKGETEF
00081 YLCMNRKGLK VGKPDGTSKE CVFIEKVLN NYTALMSAKY
00121 SGWYVGFYTKK GRPRKGPKTR ENQQDVHFMK RYPKGGPELQ
00161 KPFKYTTVTK RSRRIRPTHP A
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ 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 × 10⁶ IU/mg.

Molecular Weight: Approximately 21.1 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.

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

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuFGF-18 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for 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.