

FGF-19, Human

Cat. No.: Z02738-1

Size: 1.0 mg

Synonyms: Fibroblast Growth Factor-19(FGF-19), Human;

Description:

Fibroblast growth factor 19 (FGF19) belongs to the large FGF family which has at least 23 members. All FGF family members are heparin binding growth factors with a core 120 amino acid (aa) FGF domain that allows for a common tertiary structure. FGFs are expressed during embryonic development and in restricted adult tissues. Four distinct but related classes of FGF receptors, FGF R1, 2, 3, and 4, exist. Unlike most FGFs which bind to and activate more than one FGF receptor, FGF19 is a specific ligand for FGF R4.

Amino Acid Sequence:

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00001 MRPLAFSDAG PHVHYGWGDP IRLRHLYTSG PHGLSSCFRLR
00041 IRADGVVDCA RGQSAHSLE IKAVALRTVA IKGVHVSRYL
00081 CMGADGKMQG LLQYSEEDCA FEEIIRPDGY NVYRSEKHRL
00121 PVSLSSAKQR QLYKNRGLP LSHFLPMLPM VPEEPEDLRG
00161 HLESDFMSSP LETSMDPPFG LVTGLEAVRS PSFEK
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 150 ng/ml, corresponding to a specific activity of > 6.7 × 10³ IU/mg.

Molecular Weight: Approximately 21.8 kDa, a single non-glycosylated polypeptide chain containing 195 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-19 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.