

Background:

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 (a.a.) 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.

Source:

Recombinant Human FGF-19 is expressed from Escherichia coli. It contains AA Leu 25 - Lys 216. The protein has a calculated MW of 24.2 kDa. This protein carries a polyhistidine tag at the N-terminus.

His₆ TEV FGF-19(Leu 25 - Lys 216)

Endotoxin:

Less than 1.0 EU per µg by the LAL method.

AA Sequence:

MRPLAFSDAG PHVHYGWGDP IRLRHLYTSG PHGLSSCFLL IRADGVVDCA RGQSAHSLLK IKAVALRTVA IKGVHSVRYL
CMGADGKMQG LLQYSEEDCA FEEEIRPDGY NVYRSEKHRL PVSLSAKQR QLYKNRGFLP LSHFLPMLPM VPEEPEDLRG
HLESDMFSSP LETDSMDPFG LVTGLEAVRS PSFEK

Purity:

Purity >95% as determined by SDS-PAGE.

Formulation:

Lyophilized from 0.22 µm filtered solution in PBS, 0.3 M NaCl, 0.3 M Arginine, pH7.4. Normally trehalose is added as protectant before lyophilization.

Reconstitution

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

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

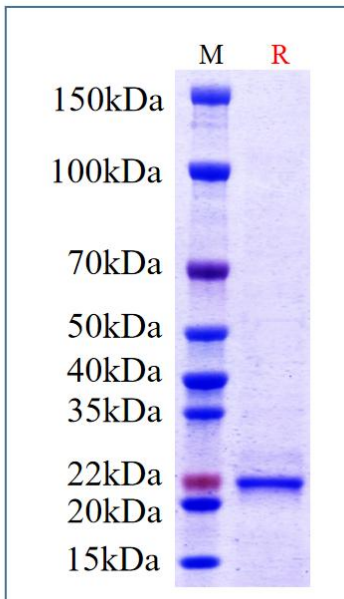
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human FGF-19, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.