

FGF-7, Human

Cat. No.: Z02735-1

Size: 1.0 mg

Synonyms: Fibroblast Growth Factor-7 (FGF-7), Human;

Description:

Keratinocyte Growth Factor-1 (KGF-1/FGF-7) is one of 23 known members of the FGF family. All FGFs have two conserved cysteine residues and share 30 - 50% sequence identity at the amino acid level. Proteins of this family play a central role during prenatal development and postnatal growth and regeneration of variety of tissues, by promoting cellular proliferation and differentiation. KGF-1/FGF-7 is a mitogen factor specific for epithelial cells and keratinocytes and signals through FGFR 2b. KGF-1/FGF-7 plays a role in kidney and lung development, angiogenesis, and wound healing.

Amino Acid Sequence:

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00001 CNDMTPEQMA TNVNCSSPER HTRSVDYMEG GDIVRRLFC
00041 RTQWYLRIDK RGKVKGTQEM KNNYNIMEIR TVAVGIVAIAK
00081 GVESEFYLAM NKEGKLYAKK ECNEDCNFKE LILENHNTY
00121 ASAKWTHNGG EMFVALNQKG IPVVRGKTKK EQKTAHFLPM
00161 AIT
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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 10 ng/ml, corresponding to a specific activity of > 1.0 × 10⁵ IU/mg.

Molecular Weight: Approximately 18.9 kDa, a single, non-glycosylated polypeptide chain containing 163 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered solution in 20 mM PB, 0.5 M NaCl, pH 8.0.

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: > 96 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rHuKGF-1/FGF-7 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.