

FGF-10, Human

Cat. No.: Z02737-25

Size: 25.0 ug

Synonyms: Fibroblast Growth Factor-10 (FGF-10), Human;

Description:

KGF-2(also known as FGF-10) was originally identified from rat embryos by homology-based polymerase chain reaction. Human and mouse KGF-2 were subsequently cloned. The human KGF-2 cDNA encodes a 208 amino acid residue protein with a hydrophobic amino-terminal signal peptide. Human KGF-2 shares approximately 92% and 95% amino acid sequence identity with mouse and rat KGF-2, respectively. Among the FGF family members, KGF-2 is most closely related to FGF-7. The expression of KGF-2 transcripts has been shown to be most abundant in the embryo and adult lung. Recombinant KGF-2 preparations have been shown to be mitogenic for epithelial and epidermal cells but not fibroblasts. Based on its in vitro biological activities and in vivo expression pattern, KGF-2 has been proposed to play unique roles in the brain, in lung development, wound healing and limb bud formation.

Amino Acid Sequence:

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00001 LGQDMVSPEA TNSSSSFSS PSSAGRHVRS YNHLQGDVRW
00041 RKLFSFTKYF LKIEKNGKVS GTKKENCYPYS ILEITSVEIG
00081 VVAVKAINS NYYLAMNKKGK LYGSKEFNND CKLKERIEEN
00121 GYNTYASFNW QHNGRQMYVA LNGKGAPRRG QKTRRKNTSA
00161 HFLPMVVHS
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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 19.1 kDa, a single, non-glycosylated polypeptide chain containing 169 amino acids.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in 2 × 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: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuKGF-2/FGF-10 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.