



User Manual

Keratinocyte Growth Factor-2/FGF-10 (KGF-2/FGF-10) (Human)
Cat. No. HEGFP-08021

Description:

Keratinocyte Growth Factor-2 (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.

Source:

Escherichia coli

Unit:

5 µg

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.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4.

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.

Molecular Weight:

Approximately 19.3 kDa, 169 amino acid residues consisting of the mature human KGF-2 (amino acid residues 40 – 208).

Endotoxin:

Less than 1 EU/μg of KGF-2/FGF-10 as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by a cell proliferation assay using monkey 4MBr-5 cells is less than 100 ng/mL, corresponding to a specific activity of $> 1.0 \times 10^4$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

LGQDMVSPE ATNSSSSSFS SPSSAGRHRV SYNHLQGDVR WRKLFSTKY
FLKIEKNGKV SGTKKENCYP SILEITSVEI GVVAVKAINS NYLAMNKKG KLYGSKEFNN
DCKLKERIEE NGYNTYASFN WQHNGRQMYV ALNGKGAPRR GQKTRRKNTS
AHFLPMVVHS

Purity:

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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