

Recombinant Human Keratinocyte Growth Factor-1/FGF-7 (rHuKGF-1/FGF-7)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	104-07
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 18.9 kDa, a single, non-glycosylated polypeptide chain containing 163 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	CNDMTPEQMA TNVNCSSPER HTRSVDYMEG GDIRVRLFC RTQWYLRIK RGKVKGTQEM KNNYNIMEIR TVAVGIVAIAK GVESEFYLAM NKEGKLYAKK ECNEDCNFKE LILENHNTY ASAKWTHNGG EMFVALNQKG IPVRGKKTCK EQKTAHFLPM AIT
Purity:	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ 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 × 10 ⁵ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in 20 mM PB, 0.5 M NaCl, pH 8.0.
Endotoxin:	Less than 1 EU/µg of rHuKGF-1/FGF-7 as determined by LAL method.
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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Keratinocyte Growth Factor-1/FGF-7

Human KGF-1 also known as Fibroblast growth factor 7 (FGF-7), is encoded by the FGF7 gene. KGF-1 only binds to the b splice form of the tyrosine kinase receptor, FGFR2b/KGFR. Affinity between KGF-1 and its receptor can be increased by heparin or heparin sulfate proteoglycan. FGF-10, also called keratinocyte growth factor 2 (KGF-2), shares 51 % amino acid sequence identity and similar function to KGF-1, but uses an additional receptor, FGFR2c. KGF-1 plays an important role in the regulation of embryonic development, cell proliferation and cell differentiation. KGF-1 acts on keratinocytes, and exhibits mitogenic activity for epidermal cells, but essentially no activity for fibroblasts. KGF-1 has species crossactive, human KGF-1 shares 96 % and 92 % amino acid sequence identity with murine and rat FGF-7, respectively.