

**Recombinant Human Keratinocyte Growth Factor-2
(rhKGF-2)
Catalog Number: 104-10**

Description	Keratinocyte Growth Factor-2 (KGF-2) 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. KGF-2 transcripts has been shown to be most abundant in the embryo and adult lungs. Recombinant KGF-2 preparations have been shown to be mitogenic for epithelial and epidermal cells but not fibroblasts. Based on its <i>in vitro</i> biological activities and <i>in vivo</i> expression pattern, KGF-2 has been proposed to play unique roles in the brain, in lung development, wound healing and limb bud formation
Synonyms	FGF-10, FGF10
AA Sequence	MLGQDMVSPE ATNSSSSSFS SPSSAGRHVR SYNHLQGDVR WRKLFSTKY FLKIEKNGKV SGTKKENCYPY SILEITSVEI GVVAVKAINS NYLAMNKKG KLYGSKEFNN DCKLKERIEE NGYNTYASFN WQHNGRQMYV ALNGKGAPRR GQKTRRKNTS AHFLPMVVHS
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 19.3 kDa, 170 amino acid residues consisting of Methionine and the mature human KGF-2 (amino acid residues 40 – 208).
Purity	>96% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. The ED ₅₀ is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10 ⁶ units/mg, as determined by proliferation of BaF3 cells expressing FGF receptors.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	< 1EU/µg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.