

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

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| <b>Description</b>         | 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 |
| <b>Synonyms</b>            | FGF-10, FGF10  |
| <b>AA Sequence</b>         | MLGQDMVSPE ATNSSSSFS SPSSAGRHVR SYNHLQGDVR WRKLFSFTKY<br>FLKIEKNGKV SGTKKENCPY SILEITSVEI GVVAVKAINS NYLAMNKKG<br>KLYGSKEFNN DCKLKERIEE NGYNTYASFN WQHNGRQMYV ALNGKGAPRR<br>GQKTRRKNTS AHFLPMVVHS  |
| <b>Source</b>              | <i>Escherichia coli</i>  |
| <b>Molecular Weight</b>    | Approximately 19.3 kDa, 170 amino acid residues consisting of Methionine and the mature human KGF-2 (amino acid residues 40 – 208).  |
| <b>Purity</b>              | >96% by SDS-PAGE and HPLC analyses.  |
| <b>Biological Activity</b> | Fully biologically active. The ED <sub>50</sub> is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10 <sup>6</sup> units/mg, as determined by proliferation of BaF3 cells expressing FGF receptors.   |
| <b>Physical Appearance</b> | White lyophilized powder.  |
| <b>Formulation</b>         | Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.  |
| <b>Endotoxin</b>           | < 1EU/µg of growth factor as determined by LAL method.   |
| <b>Reconstitution</b>      | Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.   |
| <b>Storage</b>             | 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.   |
| <b>Usage</b>               | This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.  |