



Product Datasheet

Product Name	Recombinant Human Keratinocyte Growth Factor
Cata No	CB500121
Source	<i>Escherichia Coli.</i>
Synonyms	HBGF-7, FGF7, FGF-7, KGF.

Description

KGF is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF7 is a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells. Studies of mouse and rat homologs of this gene implicated roles in morphogenesis of epithelium, reepithelialization of wounds, hair development and early lung organogenesis.

Keratinocyte Growth Factor-1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 164 amino acids and having a molecular mass of 18995 Dalton.

The FGF-7 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50, calculated by the dose-dependant stimulation of KGF-responsive BaF3 indicator cells (measured by 3H-thymidine uptake) is < 10ng/ml corresponding to a specific activity of 105 Units/mg.

ProSpec's Keratinocyte Growth Factor biological activity was measured by the KGF's mitogenic activity on BaF3 cells expressing the KGF receptor.

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution with no additives.

Reconstitution

It is recommended to reconstitute the lyophilized Keratinocyte Growth Factor in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Keratinocyte Growth Factor1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF7 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Cys-Asn-Asp-Met.

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