Datasheet

Cat. No. P1348

Recombinant Murine Keratinocyte Growth Factor 1/FGF-7

Information

Gene ID	14178
Accession #	P36363
Alternate Names	,HBGF-7
Source	Escherichia coli.
M.Wt	Approximately 18.7 kDa, a single, non-glycosylated polypeptide chain containing 163 amino acids.
AA Sequence	CNDMSPEQTA TSVNCSSPER HTRSYDYMEG GDIRVRRLFC RTQWYLRIDK RGKVKGTQEM KNSYNIMEIR TVAVGIVAIK GVESEYYLAM NKEGKLYAKK ECNEDCNFKE LILENHYNTY ASAKWTHSGG EMFVALNQKG IPVKGKKTKK EQKTAHFLPM AIT
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 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
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM PB, pH 8.0, 1 M NaCl.
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.
Biological Activity	Fully biologically active when compared to standard. The ED 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 IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	10μg	100μg	500μg
Recombinant Murine Keratinocyte Growth Factor 1/FGF-7	10μg	100μg	500μg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles
- 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

Quality Control

Purity	> 96 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rMuKGF-1/FGF-7 as determined by LAL method.

Description

Murine 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 heparan 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 actives on keratinocytes, and exhibits mitogenic activity for epidermal cells, but essentially no activity for fibroblasts. KGF-1 has species crossactive, murine KGF-1 shares 96 % amino acid sequence identity with human and rat.

Reference

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