

Recombinant Human KGF-1/FGF-7, Tag Free

Information

Gene ID	2252
Accession #	P21781
Alternate Names	HbGF-7
Source	E.coli
Protein sequence	MCNDMTPEQMATNVNCSSPERHTRSVDYMEGGDIRVRRLLFCRTQWYLRLDKRGKVKGTQE MKNNYNIMEIIRTVAVGIVAIGVVESEFYLAMNKEGKLYAKKECNEDCNFKELILENHNT YASAKWTHNGGEMFVALNQKIPVVRGKKTKEQKTAHFLPMAIT
Tag	Tag free
M.Wt	The protein has a calculated MW of 19.0 KDa.
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 36 months from date of receipt, -20 to -70°C as supplied
Concentration	1 mg/mL
Formulation	Supplied as a 0.2 µm filtered solution in PBS, pH7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	Fully biologically active as determined by a cell proliferation assay using MCF-7 cells. The EC50 for this effect is 6-80 ng/mL.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

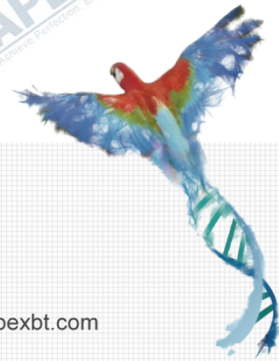
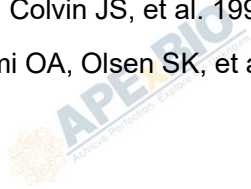
Purity	> 95 % by SDS-PAGE.
Endotoxin	Less than 1.0 EU/µg as determined by LAL method.

Description

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 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 activates 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 % amino acid sequence identity with murine, and 92 % with rat.

Reference:

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4. Eswarakumar VP, Lax I, Schlessinger J. 2005. Cytokine Growth Factor Rev. 16:139-49.
5. Belleudi F, Leone L, Nobili V, et al. 2007. Traffic. 8:1854-72.
6. Ornitz DM, Xu J, Colvin JS, et al. 1996. J Biol Chem. 271:15292-7.
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