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Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity

FGF7

Recombinant Human Fibroblast Growth Factor 7, FGF7, Endotoxin Free

Catalog No.	CRK107A	**Quantity:**	10 µg
	CRK107B		50 µg
	CRK107C		1 mg
	CRK107D		100 µg

Alternate Names: KGF, Keratinocyte Growth Factor, HBGF-7, FGF-7

Description: Fibroblast Growth Factor 7 is a member of the FGF family of 23 related mitogenic proteins. These proteins play a central role during embryonic development and postnatal growth and tissue repair, by promoting cellular proliferation and differentiation. KGF specifically stimulates epithelial cells and keratinocytes, it is the most potent growth factor identified thus far for skin keratinocytes. KGF takes part in the development of kidney and lung, angiogenesis and has a key role in wound healing following skin injuries. It shows considerable species cross-reactivity (mouse, monkey, porcine cells) as the other members of the FGF family.

UniProtKB: P21781

Gene ID: 2252

Molecular Weight: Recombinant human FGF7 contains 164 amino acids and a 16 aa His-tag for a total length of 180 aa and has a predicted molecular mass of 21.2 kD. As a result of glycosylation, the recombinant protein migrates as two bands with an apparent molecular mass of 26 and 28 kDa in SDS-PAGE..

Source: *Hordeum vulgare*, Barley grain's proteolytic activity is almost 50 times less than *E. coli* or mammalian cells. Barley seed has no human or animal viral contaminants, which is ideal for stem cell culture and *in vitro* and *in vivo* studies.

Contaminants: Purified rhFGF7 carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.

Formulation: Lyophilized from a 0.2 µm sterile filtered solution of PBS, pH 7.2.

Purity: >95% by SDS-PAGE gel analysis.

Endotoxin Level: < 0.005 ng per µg of product (0.05 EU/µg) as measured by turbidimetric kinetic assay.

Biological Activity: ED_{50}< 10 ng/ml. Bioactivity was determined by dose dependent effect on proliferation of 4MBr5 rhesus monkey epithelial cells.

Specific Activity: > 1.0 x 10^5 U/mg

Reconstitution: **Centrifuge vial prior to opening**. It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please note that the addition of any carrier protein into this product may introduce endotoxin. Depending upon the particular application employed, this may be undesirable.**

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Storage & Stability: The lyophilized protein, though stable at room temperature for two weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. **Avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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