

Recombinant Human Fibroblast Growth Factor 7, His-tagged

Cat. No. FGF7-682H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human FGF7 contains 164 amino acids and a 16 aa His-tag. Total length is 180 aa.
Species	Human
Source	Hordeum Vulgare
Description	The protein encoded by this gene 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. This protein is a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells.
Form	Lyophilized from a 0.2 µm sterile filtered solution of PBS, pH 7.2.
Molecular Weight	Predicted MW 21.2 kDa including his-tag. The glycosylated recombinant protein migrates with an apparent MW 30 kDa in SDS-PAGE.
Purity	> 98% by SDS-PAGE. Purified product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using custom human Multiplex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.
Endotoxin Level	< 0.005 ng per µg of product (0.05 EU/g) as measured by turbidimetric kinetic assay.

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Biological Activity	Bioactivity is assayed by measuring the dose dependent effect of human FGF7 on proliferation of mouse BaF3. The ED50 for a typical batch of recombinant human FGF7 is 0.20 ng/ml.
Specific Activity	5.0 x 10 ⁶ U/mg
Cross-Reactivity	Considerable species cross-reactivity, including with mouse, monkey, and pig cells.
Reconstitution	Centrifuge vial prior to opening. First add sterile distilled water to the vial to fully solubilize the protein to a concentration not less than 100 µg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.
Storage	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.
Official Symbol	FGF7

GENE INFORMATION

Gene Name	FGF7 fibroblast growth factor 7 [Homo sapiens]
Synonyms	FGF7; fibroblast growth factor 7; KGF; HBGF-7; keratinocyte growth factor; FGF-7; OTTHUMP00000162252; heparin-binding growth factor 7
Gene ID	2252
mRNA Refseq	NM_002009
Protein Refseq	NP_002000

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MIM	148180
UniProt ID	P21781
Chromosome Location	15q15-q21.1
Pathway	Downstream signaling of activated FGFR; FGFR ligand binding and activation; FGFR2 ligand binding and activation; FGFR2b ligand binding and activation; FRS2-mediated cascade; Glypican3 network; IRS-mediated signalling; IRS-related events; Insulin receptor signalling cascade; MAPK signaling pathway; Melanoma; Negative regulation of FGFR signaling; PI-3K cascade; Pathways in cancer; Phospholipase C-mediated cascade; SHC-mediated cascade
Function	chemoattractant activity; growth factor activity; heparin binding; type 2 fibroblast growth factor receptor binding
PDB rendering based on 1qpk.	

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