

Active Recombinant Human FGF2 Protein (Formulation I- Carrier Free-Lyophilized, 134-288, 154 amino acid)

Cat. No. FGF2-25H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human FGF2 Protein (Formulation I- Carrier Free-Lyophilized, 134-288, 154 amino acid) without tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	134-288, 154 amino acid
Description	The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG initiation codons, resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF.
Form	Lyophilized
Bio-activity	ED50= 0.1-1.0 ng/mL as determined by the dose dependent proliferation of NIH 3T3 cells.

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Molecular Mass	17.3 kDa
AA Sequence	AAGSITTLPALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSD PHIKLQLQAEERGVSIGKVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNT YRSRKYTSWYVALKRTGQYKLGSKTGPGQKAILFLPMSAKS
Endotoxin	< 0.01 ng/μg cytokine as determined by the LAL assay
Purity	> 98% by SDS-PAGE
Usage	Useful for cell culture and for the study of signaling pathways.
Storage	Upon receipt, it should be stored immediately at -20 to -80 centigrade. Lyophilized bFGF is stable at -20 to -80 centigrade for up to 16 months.
Storage Buffer	Sterile filtered through a 0.22 micron filter and lyophilized from Tris buffer (10 mM Tris pH7.5, 150 mM NaCl).
Reconstitution	Centrifuge vial before opening. It is recommended to reconstitute bFGF in sterile 10 mM Tris-HCl, pH 7.5 to yield a stock solution of 0.1 mg/mL of bFGF. It is stable for up to 6 months when stored at -20 centigrade and up to 12 months when stored at -80 centigrade. Multiple freeze/thaw cycles will result in significant loss of activity.
Shipping	The product is shipped at ambient temperature with ice bags.

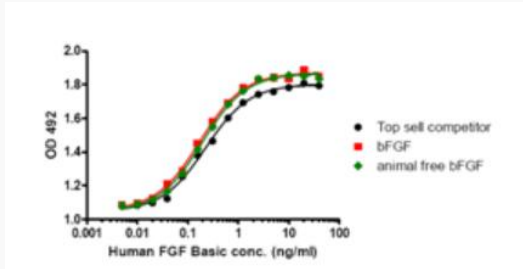
GENE INFORMATION

Gene Name	FGF2 fibroblast growth factor 2 [Homo sapiens (human)]
Official Symbol	FGF2

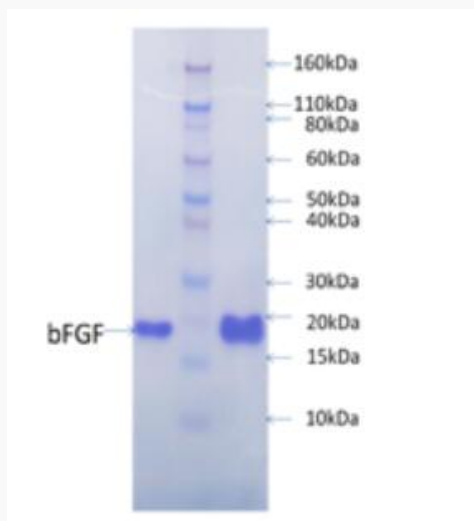
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Synonyms	FGF2; fibroblast growth factor 2; BFGF; FGFB; FGF-2; HBGF-2; fibroblast growth factor 2; basic fibroblast growth factor bFGF; fibroblast growth factor 2 (basic); heparin-binding growth factor 2; prostatropin
Gene ID	2247
mRNA Refseq	NM_002006
Protein Refseq	NP_001997
MIM	134920
UniProt ID	P09038
Activity	 The graph displays the activity of three FGF products. The x-axis represents Human FGF Basic concentration in ng/ml on a logarithmic scale from 0.001 to 100. The y-axis represents OD 492 from 1.0 to 2.0. The 'Top sell competitor' (black circles) shows a sigmoidal curve reaching a plateau of approximately 1.8. The 'bFGF' (red squares) and 'animal free bFGF' (green diamonds) show similar sigmoidal curves, reaching a higher plateau of approximately 1.9. All three products exhibit a half-maximal response (EC50) around 0.1-0.3 ng/ml.

SDS-PAGE



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