

Active Recombinant Human FGF2 (143-288aa), Ala tagged

Cat. No. FGF2-022E Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Bovine FGF2 (Pro143 Ser288, with an Nterminal Ala) was expressed in E. coli and produced using nonanimal reagents in an animalfree laboratory.
Species	Human
Source	E.coli
Description	FGF basic stimulates the proliferation of all cells of mesodermal origin, and many cells of neuroectodermal, ectodermal and endodermal origin. The cells include fibroblasts, endothelial cells, astrocytes, oligodendrocytes, neuroblasts, keratinocytes, osteoblasts, smooth muscle cells, and melanocytes. FGF basic is chemotactic and mitogenic for endothelial cells in vitro. FGF basic induces neuron differentiation, survival and regeneration. FGF basic has also been shown to be crucial in modulating embryonic development and differentiation. These observed in vitro functions of FGF basic suggest FGF basic may play a role in vivo in the modulation of such normal processes as angiogenesis, wound healing and tissue repair, embryonic development and differentiation, and neuronal function and neural degeneration. Additionally, FGF basic may participate in the production of a variety of pathological conditions resulting from excessive cell proliferation and excessive angiogenesis.
Nterminal Sequence Analysis	Ala
Molecular Mass	16.0 kDa

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SDSPAGE	17 kDa under reducing conditions
Activity	Measured in a cell proliferation assay using NR6R3T3 mouse fibroblasts. The ED50 for this effect is typically 0.1 – 0.6 ng/mL.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>97%, by SDSPAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in TrisHCl and NaCl. See Certificate of Analysis for details.
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 1. 12 months from date of receipt, 20 to 70 °C as supplied. 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3. 3 months, 20 to 70 °C under sterile conditions after reconstitution.
Unitprot ID	P09038

GENE INFORMATION

Gene Name	FGF2 fibroblast growth factor 2 (basic) [Homo sapiens]
Official Symbol	FGF2
Synonyms	FGF2; fibroblast growth factor 2 (basic); BFGF; FGFB; HBGF-2; heparin-binding

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	growth factor 2; prostaticin; basic fibroblast growth factor bFGF
Gene ID	2247
mRNA Refseq	NM_002006
Protein Refseq	NP_001997
MIM	134920
Chromosome Location	4q26
Pathway	Angiopoietin receptor Tie2-mediated signaling; Downstream signaling of activated FGFR; Endochondral Ossification; FGFR ligand binding and activation; FGFR1 ligand binding and activation; FGFR2 ligand binding and activation; FGFR3 ligand binding and activation; FGFR4 ligand binding and activation; IRS-mediated signaling; MAPK signaling pathway; Regulation of Actin Cytoskeleton
Function	fibroblast growth factor binding; fibroblast growth factor receptor binding; heparin binding; protein binding; protein tyrosine kinase activity; voltage-gated calcium channel activity

PDB rendering
based on 1bas.



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