

Recombinant Human Fibroblast Growth Factor-basic (rHu bFGF)

Catalog No: #70402

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Description

Product Name	Recombinant Human Fibroblast Growth Factor-basic (rHu bFGF)
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	> 96 % by SDS-PAGE and HPLC analyses.
Species Reactivity	Hu
Target Name	rHu bFGF
Other Names	FGF-2, HBGF-2
Accession No.	accession:P09038 GeneID:2247
Uniprot	P09038
GeneID	2247;
Calculated MW	Approximately 16.5 kDa, a sing
SDS-PAGE MW	Sterile Filtered White lyophil
Target Sequence	MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAE E RGVVSIGVC ANRYLAMKED GRLLASKCVT DECFFFERLE SNNYNTYRSR KYTSWYVALK RTGQYKLGSK TGPQKAILF LPMSAKS
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 7.6, with 150mM NaCl.
Storage	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze thaw cycles.

Background

Human bFGF, encoded by the FGF2 gene, is a member of the fibroblast growth factor (FGF) family. Fibroblast growth factor was found in pituitary extracts in 1973 and then tested in a bioassay that caused fibroblasts to proliferate. After further fractionating the extract using acidic and basic pH, two different forms have isolated that named "acidic fibroblast growth factor" (FGF-1) and "basic fibroblast growth factor" (FGF-2). Human bFGF shares 54 % amino acid sequence identity with aFGF. Affinity between bFGF and its receptors can be increased by heparin or heparan sulfate proteoglycan. bFGF plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. bFGF are also involved in a variety of biological processes, including embryonic development , morphogenesis, tissue repair, tumor growth and invasion. Additionally, bFGF is frequently used for a critical component of cell culture medium, e.g., human embryonic stem cell culture medium, serum-free culture systems.

References

1. Armelin HA. 1973. Proc Natl Acad Sci U S A. 70:2702-6.
2. Gospodarowicz D. 1974. Nature. 249:123-7.
3. Eswarakumar VP, Lax I, Schlessinger J. 2005. Cytokine Growth Factor Rev. 16:139-49.
4. Ornitz DM, Xu J, Colvin JS, et al. 1996. J Biol Chem. 271:15292-7.
5. Landriscina M, Bagala C, Mandinova A, et al. 2001. J Biol Chem. 276:25549-57.
6. Fernandez IS, Cuevas P, Angulo J, et al. 2010. J Biol Chem. 285:11714-29.
7. Liu Y, Song Z, Zhao Y, et al. 2006. Biochem Biophys Res Commun. 346:131-9.

Note: This product is for in vitro research use only