

## Recombinant Rat FGF-basic

Catalog No: #74402

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Recombinant Rat FGF-basic
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	> 98 % by SDS-PAGE and HPLC analyses.
Species Reactivity	Rt
Target Name	rr FGF-basic
Other Names	FGF-2, HBGF-2
Accession No.	accession:P13109 GeneID:54250
Uniprot	P13109
GeneID	54250;
Calculated MW	Approximately 16.4 kDa, a sing
SDS-PAGE MW	Sterile Filtered White lyophil
Target Sequence	MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
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

Rat 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). Rat bFGF shares 96 % amino acid sequence identity with human bFGF, and 98 % amino acid sequence identity with mouse. 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