

Human FGF basic / FGF2 (cell culture grade) - Purified

Alternate names:	BFGF, FGFB, Fibroblast growth factor 2 (basic), HBGF-2, HBGF2, Heparin-binding growth factor 2
Catalog No.:	AR10039PU-L
Quantity:	1 mg
Background:	Basic fibroblast growth factor 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 functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. Three alternatively spliced variants encoding different isoforms have been described. The heparin-binding growth factors are angiogenic agents in vivo and are potent mitogens for a variety of cell types in vitro. There are differences in the tissue distribution and concentration of these 2 growth factors.
Uniprot ID:	P09038
NCBI:	NP_001997.5
GenID:	2247
Species:	Human
Source:	E. coli
Format:	State: Sterile Filtered White lyophilized (freeze-dried) powder Purity: > 98.0% as determined by both RP-HPLC and SDS-PAGE analysis. Purification Method: Proprietary chromatographic techniques. Buffer System: Lyophilized from a concentrated (1.0 mg/ml) sterile solution containing 5mM NaPO₄ and 100mM NaCl Reconstitution: Restore in sterile 18MΩ·cm⁻¹ H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions
Description:	Fibroblast Growth Factor-2 Human Recombinant (FGF-2) produced in <i>E.coli</i> is a single, non-glycosylated, polypeptide chain containing 155 amino acids. Protein Content: Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.8511 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein. 2. Analysis by RP-HPLC, using a standard solution of FGF-2 as a Reference Standard. AA Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be <i>Ala-Glu-Gly-Glu-Ile</i> Biological Activity: The ED50, calculated by the dose-dependant proliferation of BAF3 cells

expressing FGF receptors (measured by ³H-thymidine uptake) is < 0.5 ng/ml, corresponding to a specific activity of 2 x10⁶ Units/mg.

Molecular weight: 17353 Da

Storage:

Prior to reconstitution store at 2-8°C for one month or desiccated below -18°C for longer.

Following reconstitution store undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.