

Human FGF basic / FGF2 - Purified

Alternate names:	BFGE, FGFB, Fibroblast growth factor 2 (basic), HBGF-2, HBGF2, Heparin-binding growth factor 2
Catalog No.:	PA1015X
Quantity:	10 µg
Concentration:	0.5mg/ml
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
GeneID:	2247
Species:	Human
Source:	Insect cells, Baculovirus
Format:	State: Liquid purified protein (sterile filtered) Purity: >95% Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Buffer System: 20mM Tris pH=7.9, 100mM KCl, 1mM DTT and 20% glycerol
Description:	Fibroblast Growth Factor-2 Human Recombinant (FGF-2) produced in Sf9 insect cells is a single, glycosylated, polypeptide chain containing 155 amino acids. The FGF-basic is purified by proprietary chromatographic techniques. AA Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Ala-Gly-Ser-Ile. 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. Specific Activity: 2 x 10 ⁶ Units/mg Molecular weight: 17 kDa 17353 Dalton

- Add. Information:** 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 sequences (IntelliGenetics).
 2. Analysis by RP-HPLC, using a calibrated solution of Fibroblast Growth Factor-b as a Reference Standard.
- Storage:** Store the protein undiluted at 2-8°C for 3 weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Shelf life: one year from despatch.