

DATASHEET

Name	FGF-B, SF9, REC.HU		
Product	Fibroblast Growth Factor-basic-Sf9 Insect Cells derived, Recombinant Human	Article-No.	40112
Formulation	Sterile filtered liquid - (0.5mg/ml) Contains 20mM Tris pH=7.9, 100mM KCl, 1mM DTT and 20% Glycerol	Storage	Freezer at -20°C Prevent freeze-thaw cycles

Introduction:

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, tumour 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.

Description:

Recombinant Human Fibroblast Growth Factor-basic produced in Sf9 insect cells is a single, glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17353 Daltons. The rHuFGF-b Sf9 is purified by proprietary chromatographic techniques.

Source: Baculovirus

Purity: > 98.0% (per RP-HPLC & SDS-PAGE)

Stability:

rHuFGF-b Sf9, although stable at 4°C for 3 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Ala-Gly-Ser-Ile.

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Biological Activity:

The ED₅₀, calculated by the dose-dependent proliferation of BAF3 cells expressing FGF receptors (measured by ³H-thymidine uptake) is <0.5 ng/ml, corresponding to a specific activity of 2 x 10⁶ Units/mg.

Protein content:

Protein quantification 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.

Usage:

Our products are intended for lab research only. Not for human, animal or diagnostic use.