



Product Datasheet

Product Name	Fibroblast Growth Factor-9 Human Recombinant
Cata No	CB500317
Source	<i>Baculovirus</i>
Synonyms	GAF (Glia-activating factor), HBGF-9, MGC119914, MGC119915, FGF-9.

Description

The human FGF-9 cDNA encodes a 208 amino acid residue protein that contains a single, potential N-linked glycosylation site. The native protein is glycosylated and is efficiently secreted after synthesis, although FGF -9 lacks a typical secretion signal. Rat and mouse FGF-9 show a very high homology to human FGF-9. The transcripts for FGF-9 have been found in brain and in kidney tissue. Fibroblast Growth Factor-9 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. FGF9 was isolated as a secreted factor that exhibits a growth-stimulating effect on cultured glial cells. In nervous system, this protein is produced mainly by neurons and may be important for glial cell development. Expression of the mouse homolog of this gene was found to be dependent on Sonic hedgehog (Shh) signaling. Mice lacking the homolog gene displayed a male-to-female sex reversal phenotype, which suggested a role in testicular embryogenesis. Fibroblast Growth Factor 9 may have a role in glial cell growth and differentiation during development, gliosis during repair and regeneration of brain tissue after damage, differentiation and survival of neuronal cells, and growth stimulation of glial tumors. Fibroblast Growth Factor-9 Human Recombinant produced in Sf9 insect cells is a single, glycosylated,

polypeptide chain containing 208 amino acids and having a molecular mass of 23 kDa. The FGF-9 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered white lyophilized powder.

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 5.5×10^6 Units/mg.

Purity

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

The sterile protein powder is lyophilized with no additives.

Stability

Lyophilized Fibroblast Growth Factor 9 Human Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution FGF-9 should be stored at 4°C between 2-7 days and for future use below -18°C .

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

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Please prevent freeze-thaw cycles.

Sequence

The sequence of the first five N-terminal amino

acids was determined and found to be
Met-Ala-Pro-Leu-Gly.

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