



Product Datasheet

Product Name	Fibroblast Growth Factor-9 Rat Recombinant
Cata No	CB501292
Source	<i>Escherichia Coli.</i>
Synonyms	GAF (Glia-activating factor), HBGF-9, MGC119914, MGC119915, FGF-9.

Description

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.

Rat FGF9 Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 205 amino acids and having a molecular mass of 23308 Dalton.

The FGF-9 Mouse Recombinant is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) 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 2 x 10⁶ Units/mg.

Purity

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

Formulation

The FGF-9 was lyophilized from 10mM phosphate buffer, pH-7.5 & 75mM Ammonium Sulfate.

Reconstitution

It is recommended to reconstitute the lyophilized Rat FGF-9 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Rat Fibroblast Growth Factor-9 although stable at room temperature for 3 weeks, should be

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stored desiccated below -18°C. Upon reconstitution FGF9 Rat Recombinant 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).

Please prevent freeze-thaw cycles.

Sequence

Product Datasheet

PLGEVGSYFG VQDAVPFGNV PVLVVDSPVL
LNDHLGQSEA GGLPRGPAVT DLDHLKGILR
RRQLYCRTGF HLEIFPNGTI QGTRKDHSRF
GILEFISIAV GLVSIRGVDS GLYLG MNEKG
ELYGSEKLTQ ECVFREQFEE N WYNTYSSNL
YKHVDTGRRY YVALNKDGTP REGTRTKRHQ
KFTHFLPRPV DPKVPELYK DILSQS

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