

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-9, Mouse

Catalog Number: BK0050-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Fibroblast Growth Factor-9 (FGF-9) is a pleiotropic cytokine and belongs to the heparin-binding FGF family. Like other members in the family, FGF-9 resembles a β -trefoil structure. FGF-9 undergoes reversible dimerization, a common characteristic shared by its subfamily members, FGF-16 and FGF-20. The mutations involved in the homodimerization also affect the affinity for heparin, binding to FGF receptors, and biological activity. In vivo, FGF-9 is expressed in limb buds, the developing skeleton, and in the intestines during late stage embryogenesis. FGF-9 is essential for the development of heart, lung, kidney, cecum, and testes; and the reduction of FGF-9 level leads to premature differentiation. FGF-9 also works along with Bone Morphogenetic Protein-7 (BMP-7) to promote the survival of nephron progenitors. Recombinant mouse Fibroblast Growth Factor (rmFGF-9) produced in E.coli is a single non-glycosylated polypeptide chain containing 207 amino acids. A fully biologically active molecule, rmFGF-9 has a molecular mass of 23.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

23.4 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

Biological Activity:

ED50 < 5 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of $> 2 \times 10^5$ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MPLGEVGSYFGVQDAVPFGNVPVLPVD-
SPVLLNDHLGQSEAGGLPRGPAVTDLD-
HLKGILRRRQLYCRTGFHLEIFPNGTIQGTRK-
DHSRFGILEFISIAVGLVSIRGVDSGLYL-
GMNEKGELYGSEKLTQECVFREQFEEN-
WYNTYSSNLYKHVDTGRRYYVAL-
NKDGTREGTRTKRHQKFTH-
FLRPVDPDKVPELYKDILSQS

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/mL.

Storage:

Lyophilized recombinant mouse Fibroblast Growth Factor (rmFGF-9) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rmFGF-9 remains stable up to 2 weeks at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C.

Usage:

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