

Rev03
Update: Dec,14,2021

DATASHEET

FGF-9, Mouse

Cat. No.: Z03145

Product Introduction

Species	Mouse
Protein Construction	Expressed with an N-terminal Met. FGF-9 [Pro3-Ser208(Ser34Asn)] Accession # P54130
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 5.0 ng/ml, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 2.0 × 10 ⁵ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~23.4 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : 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.

Synonyms : Fibroblast Growth Factor-9; FGF9; GAF; Glia-activating factor; HBGF-9

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.