Recombinant Murine Fibroblast Growth factor 9

#R00256

Size: 10 μg/100 μg/500 μg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Fibroblast growth factor 9 (FGF-9) encoded by the FGF-9 gene is a member of the fibroblast growth factor (FGF) family. It plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. In addition, this protein was isolated as a secreted factor that exhibits a growth-stimulating effect on cultured glial cells and it is a heparin-binding protein. Furthermore, FGF-9 is a monomer and interacts with FGFR1, FGFR2, FGFR3 and FGFR4. Recombinant mouse FGF-9 is synthesized as a 208 a.a. precursor that contains a 3 a.a. signal sequence. Specifically, The mouse FGF-9 shares 99 % a.a. sequence identity with rat FGF-9.

AA Sequence

MPLGEVGSYFGVQDAVPFGNVPVLPVDSPVLLNDHL
GQSEAGGLPRGPAVTDLDHLKGILRRRQLYCRTGFH
LEIFPNGTIQGTRKDHSRFGILEFISIAVGLVSIRGVDS
GLYLGMNEKGELYGSEKLTQECVFREQFEENWYNTY
SSNLYKHVDTGRRYYVALNKDGTPREGTRTKRHQKF
THFLPRPVDPDKVPELYKDILSQS

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	GAF, HBGF-9
Accession	P54130
GeneID	14180
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 23.4 kDa, a single non-glycosylated polypeptide chain containing 207 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED_{50} as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml, corresponding to a specific

	activity of > 2.0 × 10^6 IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2μm filtered concentrated solution in 20 mM Tris, 500 mM NaCl, pH 8.5.
Endotoxin	Less than 1 EU/μg of rMuFGF-9 as determined by LAL method.