

Recombinant Rat Fibroblast Growth Factor 9

#R00321

Size: 5 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) is a member of the fibroblast growth factor (FGF) family. All FGF family members are heparin binding growth factors with a core 120 amino acid (a.a.) FGF domain that allows for a common tertiary structure. FGF-9 plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. This protein was isolated as a secreted factor that exhibits a growth-stimulating effect on cultured glial cells. FGF-9 is a monomer and interacts with FGFR1, FGFR2, FGFR3 and FGFR4. The rat FGF-9 shares 98 % a.a. sequence identity with human FGF-9.

AA Sequence

LGEVGSYFGVQDAVPFGNVPVLPVDSPVLLSDHLGQ
SEAGGLPRGPAVTDLDHLKGILRRRQLYCRTGFHLEI
FPNGTIQGTRKDHRSRFGILEFISIAVGLVSIRGVDSGLY
LGMNEKGELYGSEKLTQECVFREQFEENWYNTYSS

NLYKHVDTGRRYYVALNKDGTREGTRTKRHQKFTH
FLPRPVDPDKVPELYKDILSQS

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, Glia-activating factor, HBGF-9
Accession	P36364
GeneID	25444
Species	Rat
Source	Escherichia coli.
Molecular Weight	Approximately 23.1 kDa, a single non-glycosylated polypeptide chain containing 205 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 $> 2.0 \times 10^6$ IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM Tris, 400 mM NaCl, pH 8.0.
Endotoxin	Less than 1 EU/ μ g of rRtFGF-9 as determined by LAL method.