

# Cytokines

## Mouse Recombinant FGF-9



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### Fibroblast growth factor 9

Catalog # 78176  
78176.1

10 µg  
50 µg

## Product Description

Fibroblast growth factor (FGF) 9 is a pleiotropic member of the FGF family. FGFs are heparin-dependent regulators of cell proliferation and differentiation (Itoh & Ornitz). FGF-9 signals by binding FGFR3 (IIIb) and the IIIc splice variants of the FGFR1, FGFR2, and FGFR3 receptors (Santos-Ocampo et al.; Mohammadi et al.; Plotnikov et al.). In mice, deletion of FGF-9 is lethal and expression of FGF-9 affects development of the skeleton, cerebellum, lungs, heart, vascular system, digestive tract, and testes (Colvin et al.; Harada et al.; Lin et al.). Altered levels of FGF-9 have also been reported in various types of human cancers (Leushacke et al.; Abdel-Rahman et al.).

## Product Information

**Alternative Names:** Fibroblast growth factor-9, GAF, Glia-activating factor, HBGF-9  
**Accession Number:** P54130  
**Amino Acid Sequence:** MPLGEVGSYF GVQDAVPFGN VPVLPVDSPV LLNDHLGQSE AGGLPRGPAV TDLHLKGIL RRRQLYCRTG FHLEIFPNGT IQGTRKDHSR FGILEFISIA VGLVSIRGVD SGLYLG MNEK GELYGSEKLT QECVFREQFE ENWYNTYSSN LYKHVDTGRR YYVALNKDGT PREGTRTKRH QKFTHFLPRP VDPDKVPELY KDILSQS  
**Predicted Molecular Mass:** 23.4 kDa  
**Species:** Mouse  
**Cross Reactivity:** Reported to be species-specific  
**Formulation:** Lyophilized after dialysis against phosphate-buffered saline.  
**Source:** E. coli

## Specifications

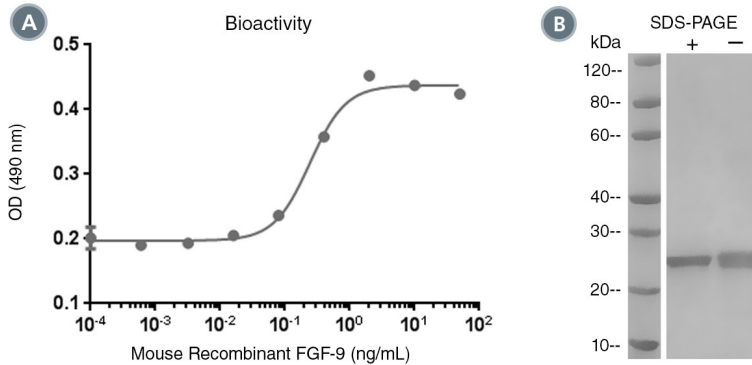
**Activity:** The specific activity is  $\geq 2 \times 10^5$  units/mg ( $EC_{50} \leq 5$  ng/mL) as determined by a cell proliferation assay using 3T3 cells.  
**Purity:**  $\geq 95\%$   
**Endotoxin Level:** Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is  $\leq 0.2$  EU/µg protein.

## Preparation and Storage

**Storage:** Store at  $-80^\circ\text{C}$ .  
**Stability:** Stable as supplied for 12 months from date of receipt.  
**Preparation:** Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex.

OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at  $2 - 8^\circ\text{C}$  for more than 2 weeks or at  $-20^\circ\text{C}$  to  $-80^\circ\text{C}$  for more than 3 months. Avoid repeated freeze-thaw cycles.

## Data



(A) The biological activity of Mouse Recombinant FGF-9 was tested by its ability to promote the proliferation of 3T3. Cell proliferation was measured using a fluorometric assay method. The EC<sub>50</sub> is defined as the effective concentration of the growth factor at which cell proliferation is at 50% of maximum. The EC<sub>50</sub> in the example above is less than 5 ng/mL.

(B) 2 µg of Mouse Recombinant FGF-9 was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Mouse Recombinant FGF-9 has a predicted molecular mass of 23.4 kDa.

## Related Products

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## References

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