

## Background:

FGF-9 (fibroblast growth factor-9), also called HBGF-9 (heparin-binding growth factor-9) and GAF (glia-activating factor), is an approximately 26 kDa secreted glycoprotein of the 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 targets glial cells, astrocytes cells and other cells that express the FGFR 1c, 2c, 3b, 3c, and 4. FGF-9, -16 and -20 form a subfamily that shares 65-71% aa sequence identity, binds FGF R3 (IIIb), and are efficiently secreted despite having an uncleavable, bipartite signal sequence. Secreted human FGF-9 is a 205-207 aa protein that lacks the N-terminal 1-3 aa and shares 98% sequence identity with mouse, rat, equine, porcine and bovine FGF-9.

## Source:

Recombinant Human FGF-9 is expressed from Escherichia coli. It contains AA Ala 2 - Ser 208. Predicted molecular mass 26.2 kDa. This protein carries a polyhistidine tag at the N-terminus.

**His<sub>6</sub> TEV FGF-9 (Ala 2 - Ser 208)**

## Endotoxin:

Less than 1.0 EU per µg by the LAL method.

## AA Sequence:

APLGEVGNFY GVQDAVPFGN VPVLPVDSPV LLS DHLGQSE AGGLPRGPAV TLDLHLKGIL RRRQLYCRTG FHLEIFPNGT  
IQGTRKDHSR FGILEFISIA VGLVSIRGVD SGLYLG MNEK GELYGSEKLT QECVFREQFE ENWYNTYSSN LYKHVDTGRR  
YYVALNKDGT PREGTRTKRH QKFTHFLPRP VDPDKVPELYKDILSQS

## Purity:

Purity >90% as determined by SDS-PAGE.

## Formulation:

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization. Contact us for customized product form or formulation.

## Reconstitution

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.

## Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

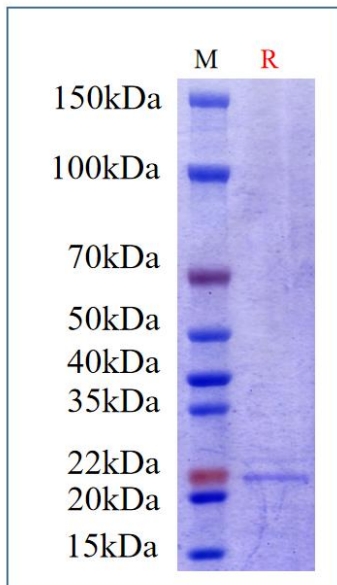
**Please avoid repeated freeze-thaw cycles.**

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



Human FGF-9, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.