

APA036Hu01 2mg
Active Active Fibroblast Growth Factor 9 (FGF9)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Met1~Ser208

Tags: N-terminal His-tag

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 800µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 6.9

Predicted Molecular Mass: 27.1kDa

Accurate Molecular Mass: 26&27kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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MAPLGEVGNV FGVQDAVPFG NVPVLPVDSP VLLSDHLGQS EAGGLPRGPA  
VTDL DHLKGI LRRRQLYCRT GFHLEIFPNG TIQGTRKDHS RFGILEFISI  
AVGLVSIRGV DSGLYLGMNE KGELYGSEKL TQECVFREQF EENWYNTYSS  
NLYKHVDTGR RYYVALNKDG TPREGTRTKR HQKFTHFLPR PVDPDKVPEL  
YKDILSQS
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[ACTIVITY]

Fibroblast Growth Factor 9 (FGF9) is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF9 was isolated as a secreted factor that exhibits a growth-stimulating effect on cultured glial cells. In nervous system, this protein is produced mainly by neurons and may be important for glial cell development. FGF9 secreted by HSC is a candidate activating ligand for hepatocyte FGFR4 functions, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human FGF9 and recombinant human FGFR4. Briefly, biotin-linked FGF9 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to FGFR4-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30 min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C . Finally, add 50 μ l stop solution to the wells and read at 450 nm immediately. The binding activity of FGF9 and FGFR4 was shown in Figure 1, the EC50 for this effect is 0.23 μ g/mL.

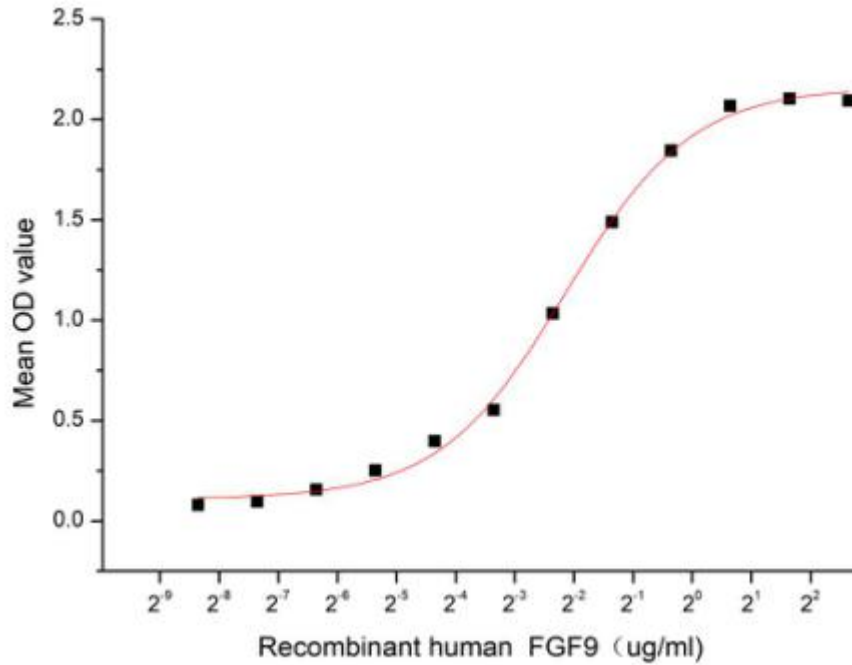


Figure 1. The binding activity of recombinant human FGF9 and recombinant human FGFR4

[IDENTIFICATION]

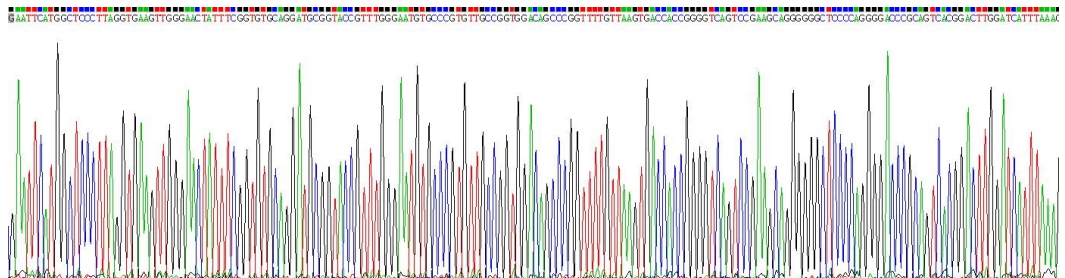


Figure 2. Gene Sequencing (extract)

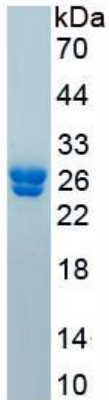


Figure 3. SDS-PAGE

Sample: Active recombinant FGF9, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.