

APA036Hu01 100µg
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

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Met1~Ser208

Tags: N-terminal His-tag

Purity: >95%

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

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

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: 24.7kDa

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

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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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MAPLGEVGNY FGVQDAVPFG NVPVLPVDSP VLLSDHLGQS EAGGLPRGPA  
VTDLHLKGI LRRRQLYCRT GFHLEIFPNG TIQGTRKDHS RFGILEFISI  
AVGLVSIRGV DSGLYLGMNE KGELYGSEKL TQECVFREQF EENWYNTYSS  
NLYKHVD TGR 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. Besides, Fibroblast Growth Factor Receptor 1 (FGFR1) has been identified as an interactor of FGF6, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF9 and recombinant human FGFR1. Briefly, FGF9 were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to FGFR1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FGF9 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of

FGF9 and FGFR1 was shown in Figure 1, and this effect was in a dose dependent manner.

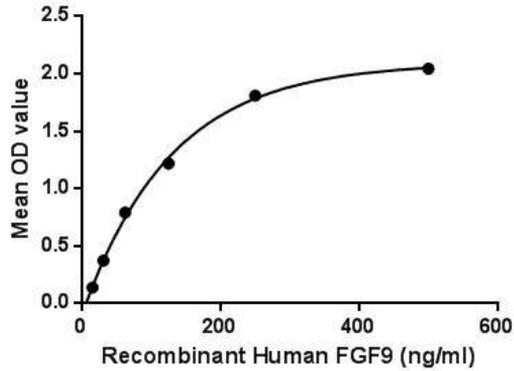


Figure 1. The binding activity of FGF9 with FGFR1.

[IDENTIFICATION]

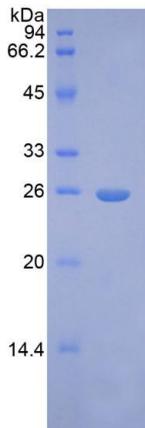


Figure 2. SDS-PAGE

Sample: Active recombinant FGF9, Human

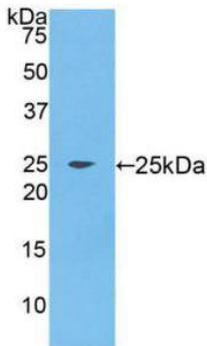


Figure 3. Western Blot

Sample: Recombinant FGF9, Human;

Antibody: Rabbit Anti-Human FGF9 Ab (PAA036Hu01)

[IMPORTANT NOTE]

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