

APA035Hu01 100µg
Active Active Fibroblast Growth Factor 6 (FGF6)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gly41~Ile208

Tags: Two N-terminal Tags, His-tag and GST-tag

Purity: >92%

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: 8.7

Predicted Molecular Mass: 48.4kDa

Accurate Molecular Mass: 38kDa as determined by SDS-PAGE reducing conditions.

Note: The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[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]

GTRANNTLLD

SRGWGTTLSR SRAGLAGEIA GVNWESGYLV GIKRQRRLYC NVGIGFHLQV
LPDGRISGTH EENPYSLLEI STVERGVVSL FGVRSAFVA MNSKGRLYAT
PSFQEECKFR ETLLPNNYNA YESDLYQGTY IALSKYGRVK RGSKVSPIMT
VTHFLPRI

[ACTIVITY]

Fibroblast growth factor 6 (FGF6) 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. It may also play an important role in muscle regeneration or differentiation. 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 FGF6 and recombinant human FGFR1. Briefly, FGF6 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-FGF6 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 FGF6 and FGFR1 was shown in Figure 1, and this effect was in a dose dependent manner.

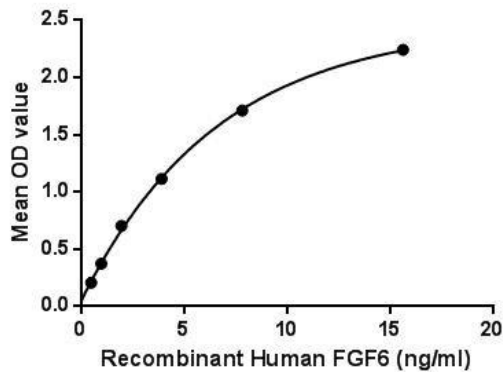


Figure 1. The binding activity of FGF6 with FGFR1.

[IDENTIFICATION]

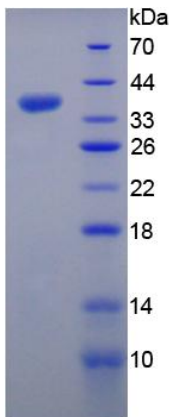


Figure 2. SDS-PAGE

Sample: Active recombinant FGF6, Human

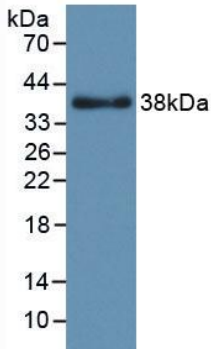


Figure 3. Western Blot

Sample: Recombinant FGF6, Human;

Antibody: Rabbit Anti-Human FGF6 Ab (PAA035Hu01)

[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.