

APC917Hu61 100µg
Active Fibroblast Growth Factor 19 (FGF19)
Organism Species: *Homo sapiens (Human)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Leu25~Lys216

Tags: N-terminal His-tag

Purity: >90%

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

Buffer Formulation: PBS, pH7.4, containing 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: 6.6

Predicted Molecular Mass: 23.0kDa

Accurate Molecular Mass: 25kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.6) 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]

```
LAFSDAGPHVHYGWDPIRLRHLTYSGPHGLSSCFLRIRADGVVDCARGQSAHSLLEIKAVLRRTVAIKGVHSVRYLCMGADGKMQGLL  
QYSEEDCAFEIEIRPDGYNVYRSEKHRLPVSLSSAKQRQLYKNRGFLPLSHFLPMLPMVPEEPEDLRGHLESDFSSPLETDSMDPFGL  
VTGLEAVRSPSFEK
```

[ACTIVITY]

Fibroblast Growth Factor 19 (FGF19) is a member of the fibroblast growth factor (FGF) family. FGF19 has important roles as a hormone produced in the ileum in response to bile acid absorption, regulates new bile acid synthesis, acting through the FGFR4/Klotho- β receptor complexes in the liver to inhibit CYP7A1. FGF19 also has metabolic effects, affecting glucose and lipid metabolism. Besides, Fibroblast Growth Factor Receptor 1 (FGFR4) has been identified as an interactor of FGF19, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF19 and recombinant human FGFR4. Briefly, FGFR4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to FGF19-coated microtiter wells and incubated for 2h at 37 $^{\circ}$ C. Wells were washed with PBST and incubated for 1h with anti-FGFR4 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 $^{\circ}$ C. Finally, add 50 μ L stop solution to the wells and read at 450nm immediately. The binding activity of FGF19 and FGFR4 was shown in Figure 1, and this effect was in a dose dependent manner, the EC50 was approximately 0.016 μ g/mL.

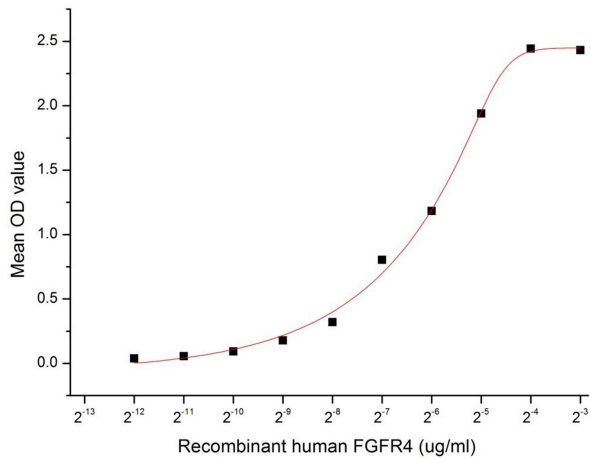


Figure 1. The binding activity of FGF19 with FGFR4

[IDENTIFICATION]

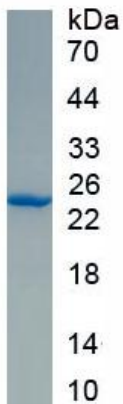


Figure 2. SDS-PAGE

Sample: Active recombinant FGF19, human

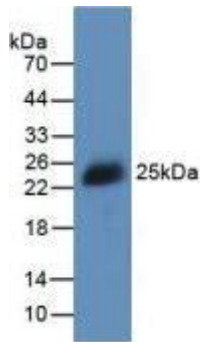


Figure 3. Western Blot

Sample: Recombinant FGF19, human;

Antibody: Rabbit Anti-human FGF19 Ab (PAC917Hu06)

[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.