APC918Hu61 1mg
Active Fibroblast Growth Factor 21 (FGF21)
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: His29~Ser209
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 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: 5.5
Predicted Molecular Mass: 23.1kDa
Accurate Molecular Mass: 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^{o}C for one month.
Aliquot and store at -80^{o}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 37ºC 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]

HP IPDSSPLLQF GGQVRQRYLY
TDDAQQTEAH LEIREDGTVG GAADQSPESL LQLKALKPGV IQILGVKTSR
FLCQRPDGAL YGSLHFDPEA CSFRELLLED GYNVYQSEAH GLPLHLPGNK
SPHRDPAPRG PARFLPLPGL PPALPEPPGI LAPQPPDVGS SDPLSMVGPS
QGRSPSYAS

[ACTIVITY]

Fibroblast growth factor 21(FGF21) is a protein that inmammals is encoded by the FGF21 gene. The proteinencoded by this gene is a member of the fibroblastgrowth factor (FGF) family and specifically a memberof the endocrine subfamily which includes FGF23 andFGF15/19. FGF21 is the primary endogenous agonist ofthe FGF21 receptor, which is composed of the co-receptors FGF receptor 1 and β-Klotho. Besides, Klotho Beta (KLb) has been identified as an interactor of FGF21, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF21 and recombinant human KLb. Briefly, FGF21 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μl then transferred to KLb-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-KLb 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℃. Finally, add 50μl stop solution to the wells and read at 450nm immediately. The binding activity of KLb and FGF21 was shown in Figure 1, and this effect was in a dose dependent manner.

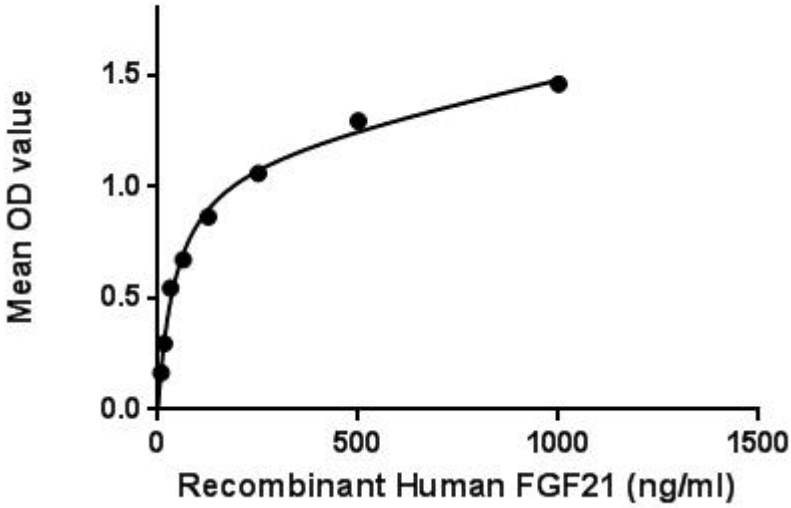

Figure 1. The binding activity of FGF21 with KLb

[IDENTIFICATION]

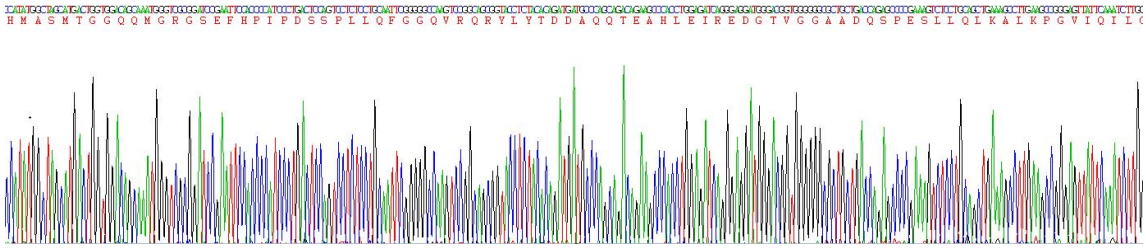

Figure 2. Gene Sequencing (extract)

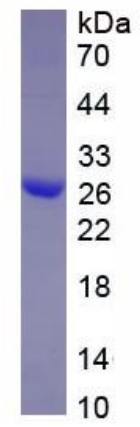

Figure 3. SDS-PAGE

Sample: Active recombinant FGF21, Human

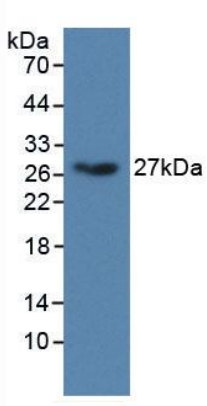

Figure 4. Western Blot

Sample: Recombinant FGF21, Human;

Antibody: Rabbit Anti- Human FGF21 Ab (PAC918Hu06)

[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.