APC909Hu01 100μg
Active Fibroblast Growth Factor 22 (FGF22)
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: Tyr33~Ser170
Tags: N-terminal His-tag
Purity: >92%
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: 11.6
Predicted Molecular Mass: 20kDa
Accurate Molecular Mass: 20kDa 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.

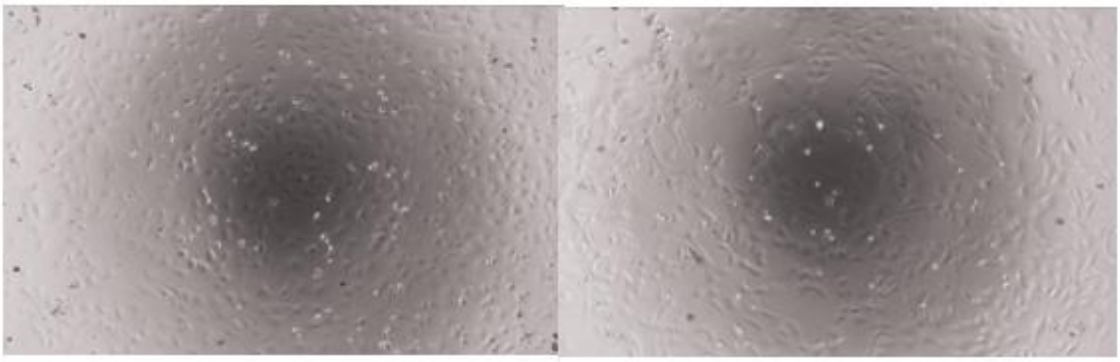
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date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

[SEQUENCE]

YPHLEGDV RWRRLFSSTH FFLRVDPGGR VQGTRWRHGQ DSILEIRSVH VGVVVIKAVS SGFYVAMNRR GRLYGSRLYT VDCRFRERIE ENGHNTYASQ RWRRRGQPMF LALDRRGGPR PGGRTRRYHL SAHFLPVLVS

[ACTIVITY]

FGF22(Fibroblast growth factor 22) 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. A proliferation assay was conducted to detect the bioactivity of recombinant human FGF22 using Balb/c 3T3 cells. Briefly, 3T3 cells were seeded into triplicate wells of 96-well plates at a density of 4,000 cells/well and allowed to attach overnight, then the medium was replaced with various concentrations of FGF22 diluted with serum-free standard DMEM. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8(CCK-8). Briefly, 10 μl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of Balb/c 3T3 cells after incubation with FGF22 for 48h observed by inverted microscope was shown in Figure1. Cell viability was assessed by CCK-8(Cell Counting Kit-8) assay after incubation with recombinant FGF22 for 48h. The result was shown in Figure2. It was obvious that FGF22 significantly increased cell viability of 3T3 cells. The ED50 of recombinant human FGF22 is 187ng/ml.



A B

Figure 1. Cell proliferation of Balb/c 3T3 cells after stimulated with FGF22.

(A)3T3 cells cultured in DMEM, stimulated with 600ng/ml FGF22 for 48h;

(B)Unstimulated Balb/c 3T3 cells cultured in DMEM for **48h.**

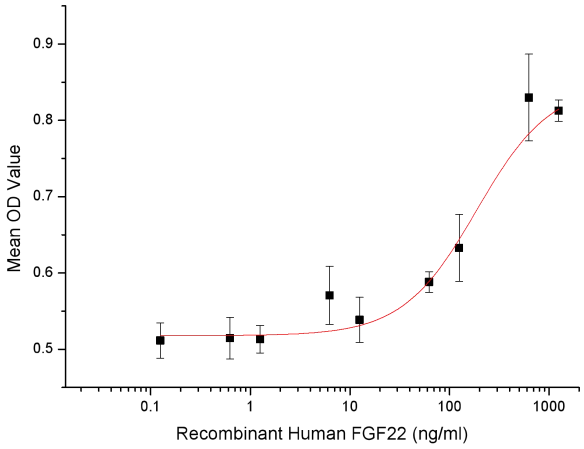


Figure 2. The dose-effect curve of FGF22 on Balb/c 3T3 cells.

[IDENTIFICATION]

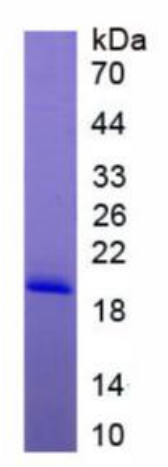


Figure 3. SDS-PAGE

Sample: Active recombinant FGF22, Human

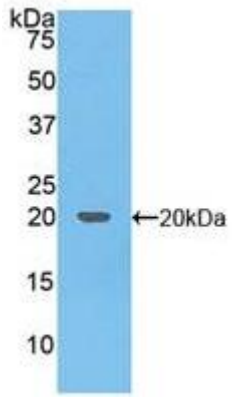


Figure 4. Western Blot

Sample: Recombinant FGF22, Human;

Antibody: Rabbit Anti- Human FGF22 Ab (PAC909Hu01)

[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.