

APL154Ra01 100µg
Active Fibroblast Growth Factor 15 (FGF15)
Organism Species: Rattus norvegicus (Rat)
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: Gly25~Lys218

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: 6.6

Predicted Molecular Mass: 23.8kDa

Accurate Molecular Mass: 24kDa 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 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]

GRPLVQ QSQSVSDEGP LFLYGWGKIT RLQYLYSAGP YVSNCF LRIR SDGSVDCEED QNERNLLEFR AVALKTIAIK
DVSSVRYLCM SADGKIYGLI RYSEEDCTFR EEMDCLGYNQ YRSMKHHLHI IFIKAKPREQ LQGQKPSNFI PIFHRSFFES
TDQLRSKMFS LPLESDSMDP FRMVEDVDHL VKSPSFQK

[ACTIVITY]

Fibroblast growth factor 15 is a protein in mouse encoded by the Fgf15 gene. It is a member of the fibroblast growth factor (FGF) family but, like FGF19, FGF21 and FGF23, has endocrine functions. FGF15 subsequently acts on a cell surface receptor complex in hepatocytes to repress bile acid synthesis and gluconeogenesis, and to stimulate glycogen and protein synthesis. Besides, Fibroblast Growth Factor Receptor 4 (FGFR4) has been identified as an interactor of FGF15, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat FGF15 and recombinant rat FGFR4. Briefly, FGF15 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l then transferred to FGFR4-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FGF15 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 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of FGF15 and FGFR4 was shown in Figure 1, and this effect was in a dose dependent manner.

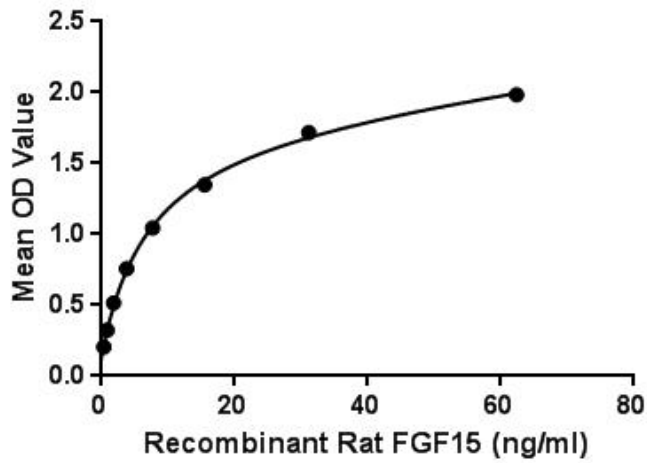


Figure 1. The binding activity of FGF15 with FGFR4

[IDENTIFICATION]

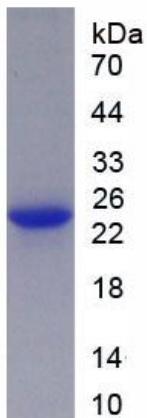


Figure 2. SDS-PAGE

Sample: Active recombinant FGF15, Rat

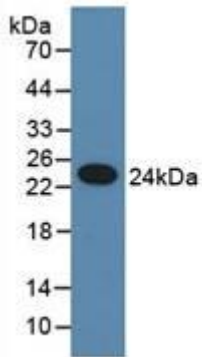


Figure 3. Western Blot

Sample: Recombinant FGF15, Rat;

Antibody: Rabbit Anti- Rat FGF15 Ab (PAL154Ra01)

[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.