

APA886Hu01 50µg

Active Peroxisome Proliferator Activated Receptor Gamma (PPARγ)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gly349~Glu488

Tags: N-terminal His-tag

Purity: >80%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 400µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.8

Predicted Molecular Mass: 17.2kDa

Accurate Molecular Mass: 16&60kDa 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]

GV

```
HEIIYTMLAS LMNKDGV LIS EGQGFMTREF LKSLRKPF GD FMEPKFEFAV  
KFNALELDDS DLAI FIAVII LSGDRPGLLN VKPIEDIQDN LLQALELQLK  
LNHPESSQLF AKLLQKMTDL RQIVTEHVQL LQVIKKTE
```

[ACTIVITY]

Peroxisome Proliferator Activated Receptor Gamma (PPAR γ) belongs to a large group of nuclear receptors controlling reproduction, metabolism, development and immune response. It is mainly expressed in adipose tissue, hematopoietic cells and the large intestine and it plays an important role in adipocyte differentiation, lipid and glucose metabolism, and modulation of immune and inflammatory reactions. Besides, Peroxisome Proliferator Activated Receptor Gamma Coactivator 1 Alpha (PPAR γ C1a) has been identified as an interactor of PPAR γ , thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human PPAR γ and recombinant mouse PPAR γ C1a. Briefly, PPAR γ was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to PPAR γ C1a-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PPAR γ pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 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 450/630 nm immediately. The binding activity of recombinant human PPAR γ and recombinant mouse PPAR γ C1a was shown in Figure 1, the EC₅₀ for this effect is 0.03 μ g/mL.

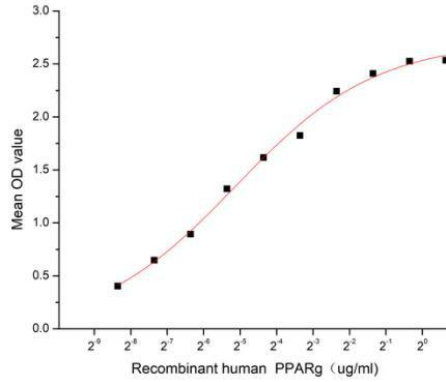


Figure 1. The binding activity of recombinant human PPARγ and recombinant mouse PPARγC1a

[IDENTIFICATION]

CGATTCCGGGCTCCGGAGGATTTCAGATGCTCCGGCTCCCTGGATGATAGGTGGGCTTCATATCCGGCGCCAGGCTCTGTGTCAGGGGCTTCCAGAGCCCTCGGAGCCCTTTTGGGACTTTATGGAGCCAGTTGAGTTCCGCTGGAGTTCAGTCCCTGGATTCAGTCCGGGCTTCGGCAATTTATTCCTGCTATTTTTCAGGAGCCCGCCGGCTT

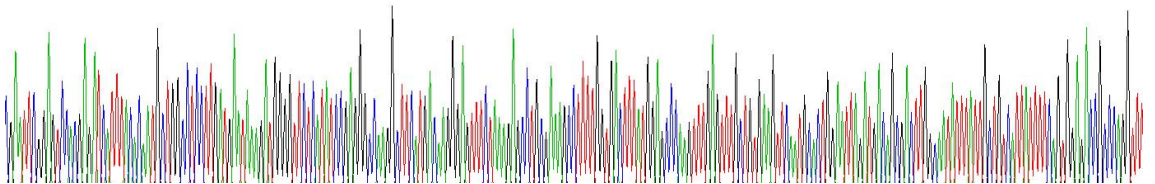


Figure 2. Gene Sequencing (extract)

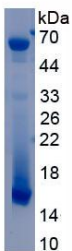


Figure 3. SDS-PAGE

Sample: Active recombinant PPARγ, Human

[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.