

APA605Ga01 100µg
Active Adiponectin (ADPN)
Organism Species: *Chicken (Gallus)*
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: Met32~Arg244

Tags: N-terminal His-tag

Purity: >90%

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

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

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 6.4

Predicted Molecular Mass: 26.9kDa

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°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]

MSCANWMGG APGHPGHNGL PGRDGKDGKD GQKGDKGEPG LQGVKGDGTGE KGATGAEGPR GFPGHMGMKG QKGESSYVYR
SAFSVGLTER APHPNVPIRF TKIFYNEQNH YDSSTGKFLC SIPGTYFFAY HLTVMYTDVK VSPLYKKDKAV IFTYDQFQEN
NVDQASGSVL LHLSLGDEVV LQVYGEENNN GUYADNINDS TFMGFLLYPD TDDR

[ACTIVITY]

Human Adiponectin (ADPN) is a 53 kDa member of the PNPLA family of phospholipase A2 enzymes. It is a plasma protein secreted by adipose tissue showing pleiotropic effects with anti-diabetic, anti-atherogenic and anti-inflammatory properties. Adiponectin and AdipoR1 regulate PPAR γ C1a and mitochondria by Ca(2+) and AMPK/SIRT1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant chicken ADPN and recombinant rat PPAR γ C1a. Briefly, ADPN 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-ADPN 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 chicken ADPN and recombinant rat PPAR γ C1a was shown in Figure 1, the EC50 for this effect is 0.12 ug/mL.

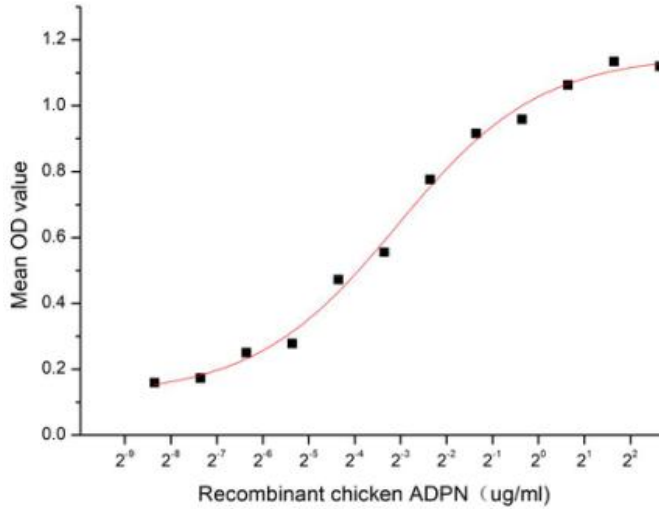


Figure 1. The binding activity of recombinant chicken ADPN and recombinant rat PPARγC1a

[IDENTIFICATION]

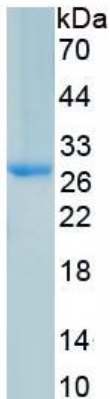


Figure 2. SDS-PAGE

Sample: Active recombinant ADPN, Gallus

[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.