

**APA252Hu01 100µg**  
**Active Apolipoprotein C1 (APOC1)**  
**Organism Species: *Homo sapiens* (Human)**  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Ser31~Ser83

**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:** 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:** 8.1

**Predicted Molecular Mass:** 7.5kDa

**Accurate Molecular Mass:** 8kDa 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.

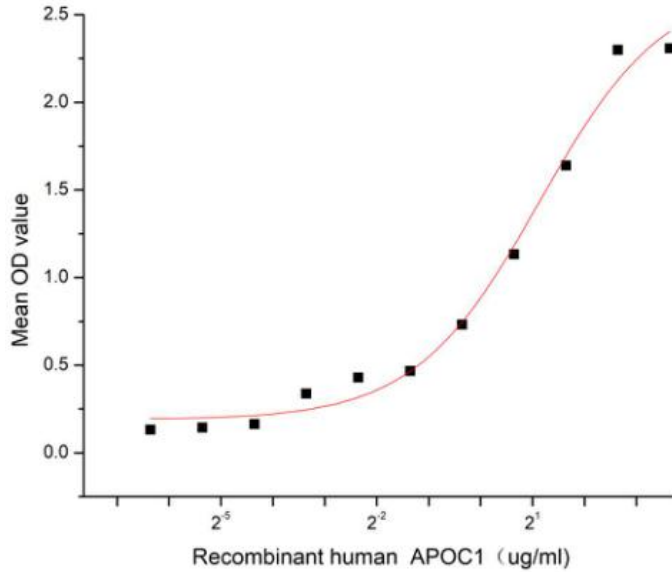
## **[ SEQUENCE ]**

SSALDKLKEF GNTLEDKARE  
LISRIKQSEL SAKMREWFSE TFQKVKEKLIK IDS

## **[ ACTIVITY ]**

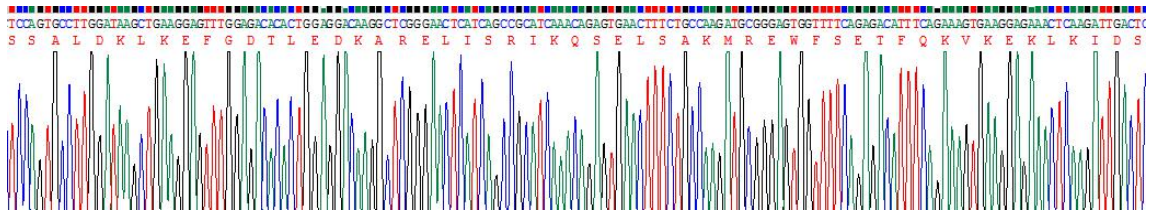
Apolipoprotein C1 (APOC1), also known as Apo-C1; ApoC-I; apo-C1B; apoC-IB, is the smallest size apolipoprotein of all apolipoprotein C family (Mr = 6.6 kDa) and located at position 19q13.32. APOC1 is primarily expressed in the liver and activated when monocytes differentiate into macrophages. It plays important roles in the innate immune response as effector of glucocorticoid-mediated responses and regulator of the inflammatory process. It has anti-inflammatory activity and also can promote the differentiation of T-cells into Th1 cells and negatively regulates differentiation into Th2 cells. Besides, Apolipoprotein C3 (APOC3) has been identified as an interactor of APOC1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human APOC1 and recombinant mouse APOC3. Briefly, APOC1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to APOC3-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-APOC1 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  $\mu$ L stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human APOC1 and recombinant mouse APOC3 was shown in Figure 1, the

EC50 for this effect is 2.19 ug/mL.

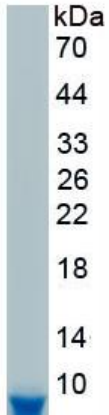


**Figure 1. The binding activity of recombinant human APOC1 and recombinant mouse APOC3**

**[ IDENTIFICATION ]**



**Figure 2. Gene Sequencing (extract)**



**Figure 3. SDS-PAGE**

**Sample: Active recombinant APOC1, 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.