

APB997Hu01 100µg
Active Apolipoprotein A5 (APOA5)
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: Asp167~Lys335

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: 6.7

Predicted Molecular Mass: 20.4kDa

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 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]

DEAW ALLQGLQSRV VHHTGRFKEL FHPYAESLVS
GIGRHHVQELH RSVAPHAPAS PARLSRCVQV LSRKLTAKAK ALHARIQQNL
DQLREELSRA FAGTGTEEGA GPDPQMLSEE VRQRLQAFRQ DTYLQIAAFT
RAIDQETEEV QQQLAPPPPG HSAFAPEFQQ TDSGK

[ACTIVITY]

Apolipoprotein A5 (APOA5) is a small protein, expressed predominantly in the liver. It has been identified to play an important role in lipid metabolism, specifically in triglyceride (TG) and TG-rich lipoproteins (TRLs) metabolism. Apolipoprotein C3 (APOC3) has been proved to be one of the ligands of APOA5. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human APOA5 and recombinant human APOC3. Briefly, APOA5 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ 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-APOA5 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 APOA5 and recombinant human APOC3 was shown in Figure 1, the EC₅₀ for this effect is 0.14 μ g/mL.

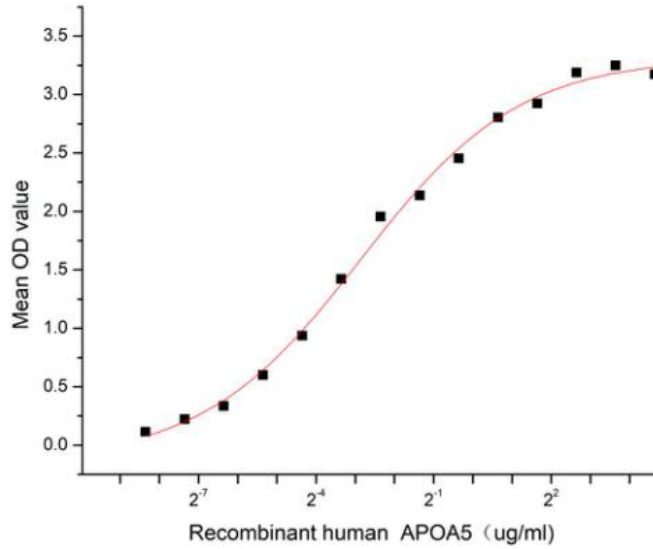


Figure 1. The binding activity of recombinant human APOA5 and recombinant human APOC3

[IDENTIFICATION]

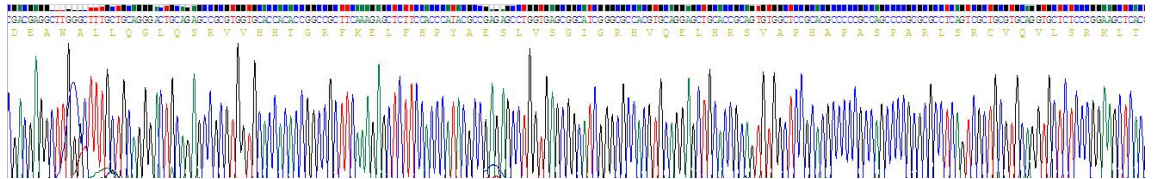


Figure 2. Gene Sequencing (extract)

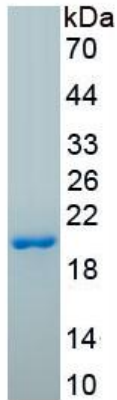


Figure 3. SDS-PAGE

Sample: Active recombinant APOA5, 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.