

Active Apolipoprotein A1 (APOA1) Instruction Manual

SBPA134Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

6.4

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

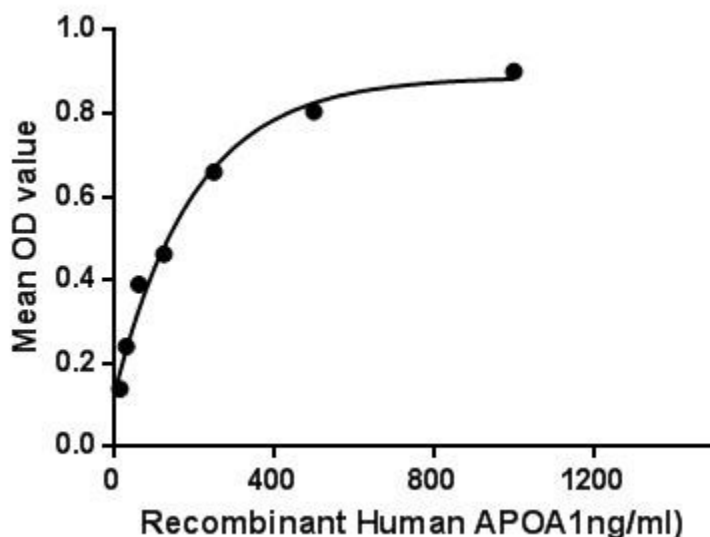


Figure. The binding activity of APOA1 with Hpt.

Apolipoprotein A1 (APOA1) is the major protein component of HDL particles in plasma. It is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. ApoA1 was also isolated as a prostacyclin (PGI₂) stabilizing factor, and thus may have an anticlotting effect. ApoA1 is often used as a biomarker for prediction of cardiovascular diseases. Besides, Haptoglobin (Hpt) has been identified as an interactor of APOA1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human APOA1 and recombinant human Hpt. Briefly, APOA1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to Hpt-coated microtiter wells and incubated for

2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-APOA1 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 50µL stop solution to the wells and read at 450nm immediately. The binding activity of APOA1 and Hpt was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.

Image

Q P Y L D D F Q K K V Q E E M E L Y R Q K V E P L R A E L Q E G A R Q K P H E L Q E K L S P I G E E M R D R A R A H V D A I R T H L A P '

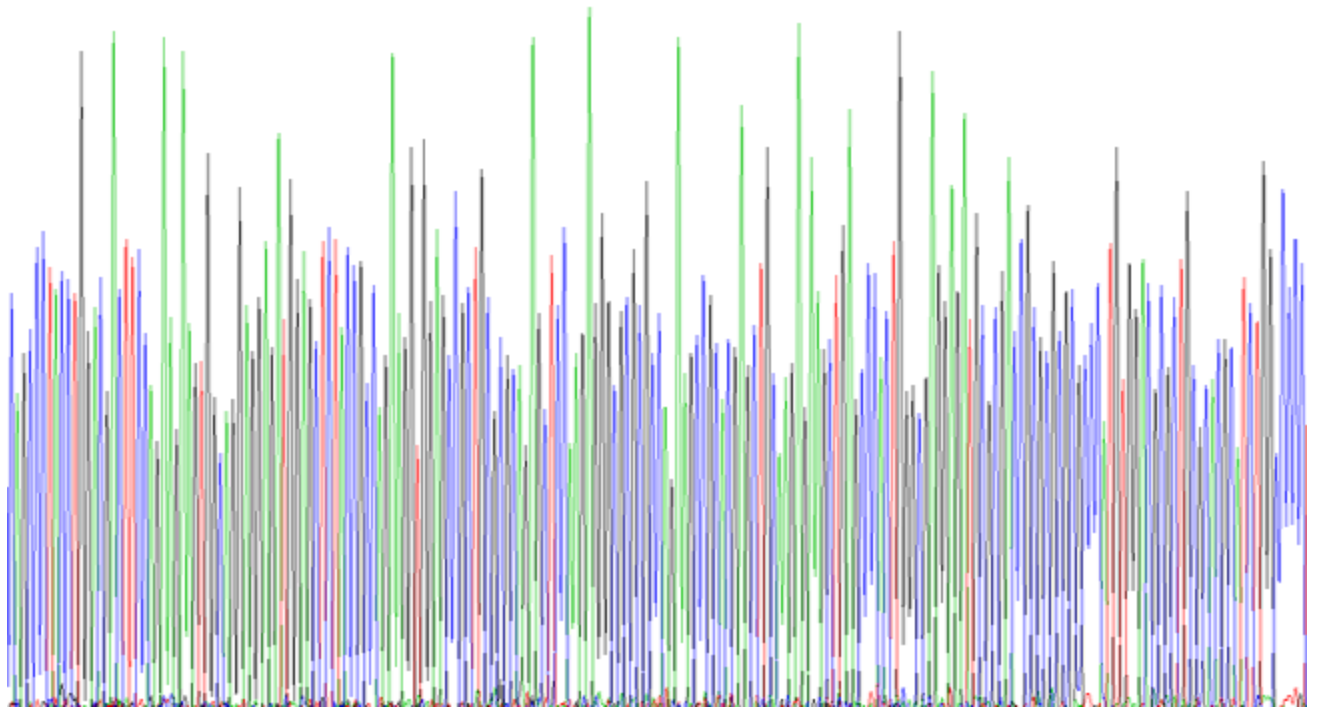


Figure. Gene Sequencing (Extract)

Image

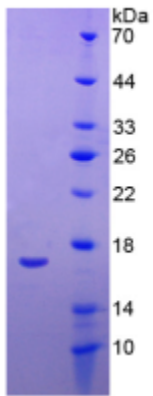


Figure. SDS-PAGE

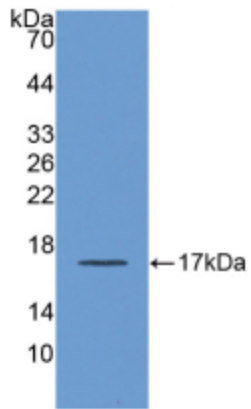


Figure. Western Blot

[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.