

APB795Hu01 100µg
Active Serum Amyloid A2 (SAA2)
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: Arg19~Tyr122

Tags: N-terminal His-tag

Purity: >95%

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: 9.1

Predicted Molecular Mass: 15.3kDa

Accurate Molecular Mass: 15kDa 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]

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RS FFSFLGEAFD GARDMWRAYS DMREANYIGS  
DKYFHARGNY DAAKRGPGGA WAAEVISNAR ENIQRLTGRG AEDSLADQAA  
NKWGR5GRDP NHFRPAGLPE KY
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[ACTIVITY]

Serum Amyloid A2 (SAA2) is a multifunctional apolipoprotein that belongs to SAA family. SAA2 is produced by hepatocytes in response to pro-inflammatory cytokines and is the most prominent members of the acute phase response (APR) during which their serum levels rise dramatically after trauma, infection and other stimuli. Besides, Apolipoprotein C3 (APOC3) has been identified as an interactor of SAA2, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human SAA2 and recombinant human APOC3. Briefly, SAA2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to APOC3-coated microtiter wells and incubated for 2h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-SAA2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, 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 µL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human SAA2 and recombinant human APOC3 was shown in Figure 1, and this effect was in a dose dependent manner.

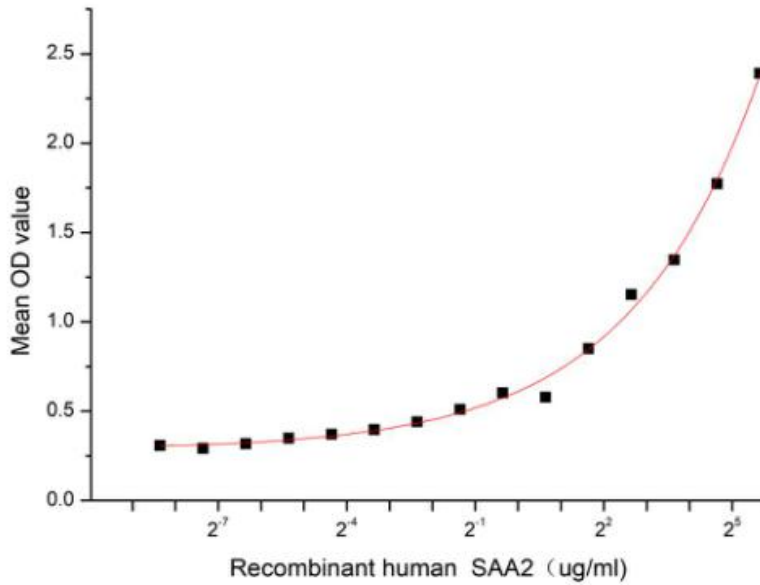


Figure 1. The binding activity of recombinant human SAA2 and recombinant human APOC3

[IDENTIFICATION]

5'ATTGGAGCCTCTTTCGCTCTTGGCGAGCCTTTGATGGGCGTGGGCGATGGGGAGCCTCTCGATGGAGCCGATTCATGGGCTGGAGATCTTCTCTCGGGGAGTATGTCCTCCAAAGGGGCGCTGGGGGTCCTGGCTCGAGGTGCTCGCATCCCGAGGATATCCGAGCTTCGAGCCATGGTGGGCGATCGCTGGGAGTGG

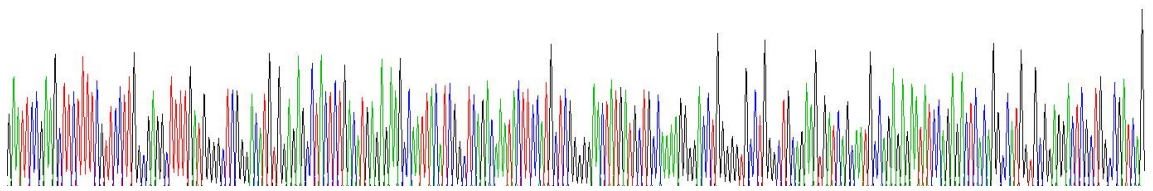


Figure 2. Gene Sequencing (extract)

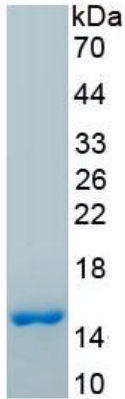


Figure 3. SDS-PAGE

Sample: Active recombinant SAA2, 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.