



## Specification

<b>Product name</b>	SAA1 Antibody
<b>Immunogen</b>	Recombinant full-length protein.
<b>Source/Isotype</b>	Mouse IgG1Kappa
<b>Reactivity</b>	Human
<b>Purification</b>	Protein G purified from hybridoma culture supernatant
<b>Application</b>	ELISA, others unspecified
<b>Form</b>	Liquid
<b>Storage Buffer</b>	In 1×PBS, pH 7.2
<b>Storage Instruction</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or lower long term. Aliquot to avoid repeated freezing and thawing.
<b>Concentration</b>	6mg/mL
<b>Lot.</b>	20220808
<b>Size</b>	1000μg

## Supporting Data

### 1. Double antibody sandwich method

#### 1.1 Reagents:

- 1.1.1 Coating Buffer: Carbonate Buffer (2.93 g NaHCO<sub>3</sub>, 1.59 g Na<sub>2</sub>CO<sub>3</sub>, 1L ddH<sub>2</sub>O)
- 1.1.2 Diluent: PBS (137 mM NaCl, 2.7 mM KCl, 8.1 mM Na<sub>2</sub>HPO<sub>4</sub>, 1.5mM KH<sub>2</sub>PO<sub>4</sub>)
- 1.1.3 Blocking Solution: 1% BSA in PBS
- 1.1.4 Secondary Ab: anti mouse IgG-HRP(Sigma A2554-1ML)

#### 1.2 Assay Protocol:

Note: The following protocol is a guideline, user need to determine their optimal experimental condition for best performance.

- 1.2.1 Coat plate with Recombinant protein SAA1 0.5ug/ml, 100ul/well, incubate at 4°C for overnight.
- 1.2.2 Wash the plate with PBST (0.05% Tween-20) once.
- 1.2.3 Add 200μL of blocking buffer each well, incubate the plate at 37°C for 2hr or 4°C overnight.
- 1.2.4 Add sample 100ul/well, incubate the plate at 37°C for 1hr.
- 1.2.5 Wash the plate with PBST (0.05% Tween-20) 3 times.
- 1.2.6 Add secondary Ab, 1:10k diluted anti-mouse IgG-HRP, 100ul/well, incubate the plate at 37°C for 0.5hr.
- 1.2.7 Wash the plate with PBST (0.05% Tween-20) 3 times.



- 1.2.8 Add 100ul/well TMB, incubate at room temperature for 10min, add 50ul/well 1N HCl or 2% H<sub>2</sub>SO<sub>4</sub>.
- 1.2.9 Read absorbance at 450nm.

## Data Background

Serum amyloid A is an acute phase reaction protein with a relative molecular weight of about 12kD, mainly produced by liver cells, heart, skeletal muscle and other extrahepatic tissues. Human SAA includes SAA1, SAA2, SAA3, and SAA4. According to human expression, SAA1 and SAA2 genes synthesize SAA1 and SAA2 proteins, called acute phase SAA (A-SAA); SAA3 gene is not expressed in human body. The SAA4 gene synthesizes the constitutive SAA (C-SAA), which is expressed at low levels in the liver, and the concentration of C-SAA does not change with pathological (disease) changes. Therefore, in acute phase reaction, it is A-SAA that rises rapidly.

In acute reverse reaction, stimulated by interleukin-I (IL-1), interleukin-6 (IL-6) and tumor necrosis factor (TNF), SAA is expressed in large quantities in the body, and its concentration can begin to rise within 3-6 hours of infection, and the concentration in the blood can rise to 100-1000 times of the initial concentration, with a half-life of about 50 minutes, and a rapid decline after the recovery of the disease.

In clinical diagnosis, the level of SAA is a sensitive index to reflect infectious diseases, which is helpful for the diagnosis of infection, disease assessment and prognosis.

## Gene Information

UniProt ID: AAH07022.1

Protein Name: Serum amyloid A-1 protein

## Related Product

Product	Cat.	Description
SAA1 Antibody	RYZ003Ab2C-1000	ELISA, others unspecified.
SAA1 Antibody	RYZ003Ab3C-1000	ELISA, others unspecified.
SAA1 Antibody	RYZ003Ab4C-1000	ELISA, others unspecified.
SAA1 Antibody	RYZ003Ab5C-1000	ELISA, others unspecified.
SAA1 Antibody	RYZ003Ab6C-1000	ELISA, others unspecified.