

## OriGene Technologies, Inc.

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## AM26249PU-N Monoclonal Antibody to Serum Amyloid A protein (SAA) - Purified

Alternate names: SAA1, SAA2

Quantity: 0.1 mg

Concentration: 0.1 mg/ml

The serum amyloid A (SAA) family comprises a number of differentially expressed apolipoproteins, acute-phase SAA1 and SAA2, the former being the major component in plasma, and constitutive SAAs (C-SAAs). Although the liver is the primary site of synthesis of both SAA types extrahepatic production has been reported. The in vivo concentrations increase by as much as 1000-fold during inflammation. Several studies have stressed its importance in the diagnosis and monitoring of various diseases. Pathological SAA values are often detected in association with normal CRP

concentrations; SAA rises earlier and more sharply than CRP.

Recently, a broader view of SAA expression and function has been emerging. Expression studies show production of SAA proteins in histologically normal, atherosclerotic, Alzheimer, inflammatory, and tumor tissues. SAA has been found to

have binding sites for high density lipoproteins, calcium, laminin, and

heparin/heparan-sulfate. Also adhesion motifs were identified and new functions, affecting cell adhesion, migration, proliferation and aggregation discovered. These findings emphasize the importance of SAA in various physiological and pathological processes, including inflammation, atherosclerosis, thrombosis, AA-amyloidosis, rheumatoid arthritis, and neoplasia. SAA has also a number of immunomodulatory roles, it can induce chemotaxis and adhesion molecule expression, has cytokine-like properties and can promote the upregulation of metalloproteinases. It enhances the binding of high-density lipoprotein to macrophages and thus helps in the delivery of lipids to sites of injury for use in tissue repair. It is thus thought to be an integral part of the disease processes. In addition, recent experiments suggest that SAA may play a "housekeeping" role in normal human tissues.

Elevated levels of SAA over time predispose to secondary amyloidosis, extracellular accumulation of amyloid fibrils, derived from a circulating precursor, in various tissue and organs. The most common form of amyloidosis occurs secondary to chronic inflammatory disease, particularly rheumatoid arthritis.

Uniprot ID: <u>P02735</u>

NCBI: <u>9606</u>

GeneID: 6288

Host / Isotype: Mouse / IgG1

Recommended Isotype

**Controls:** 

SM10P (for use in human samples), AM03095PU-N

Clone: Reu86.5

Immunogen: Human SAA and Helix Pomatia Haemocyanine



## AM26249PU-N: Monoclonal Antibody to Serum Amyloid A protein (SAA) - Purified

Format: State: Liquid 0.2 μm filtered Ig fraction

Purification: Protein G Buffer System: PBS

**Preservatives:** 0.02% sodium azide **Stabilizers:** 0.1% bovine serum albumin

Applications: Immunohistochemistry on frozen and paraffin sections: The typical starting working

dilution is 1:10. Immunoassays.

Western blot: The typical starting working dilution is 1:10.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity:** This antibody reacts with the SAA-1 type.

Species Reactivity: Tested: Human, mouse

Storage: Store at 2 - 8 °C.

Shelf life: one year from despatch.

General Readings: 1. Hazenberg, B et al; Immunohistochemical detection of Amyloid AA in formaline-

fixed paraffin-embedded rectal biopsies with the monoclonal antibody anti-human SAA antibody Reu.86.2. Amyloid and Amyloidosis 1990, VIth International Symposium

on Amyloidosis: 809.

2. Hazenberg, B et al; Monoclonal antibody based ELISA for human SAA. Amyloid and

Amyloidosis, eds. LB Natvig et al, Kluwer Acad Publ 1990: 898

Wilkins, J et al; Rapid automated enzyme immunoassays of Serum Amyloid A. Clin

Chem 1994, 40: 1284.

3. Hazenberg, B et al; A quantitative method for detecting deposits of amyloid A protein in aspirated fat tissue of patients with arthritis. Ann Rheum Dis 1999, 58: 96.