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# AM26250PU-N Monoclonal Antibody to Serum Amyloid A protein (SAA) - Purified

**Alternate names:** SAA1, SAA2

**Quantity:** 0.1 mg

**Concentration:** 0.1 mg/ml

**Background:** 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:** P02735

**NCBI:** NP_000322.2

**GeneID:** 6288

**Host / Isotype:** Mouse / IgG1

**Recommended Isotype Controls:** SM10P (for use in human samples), AM03095PU-N

**Clone:** Reu86.1

**Immunogen:** Human SAA and Helix Pomatia Haemocyanine

**Format:**

**State:** Liquid 0.2 µm filtered Ig fraction
**Purification:** Protein G Chromatography
**Buffer System:** PBS
**Preservatives:** 0.02% Sodium Azide
**Stabilizers:** 0.1% BSA

**Applications:**

**Immunohistochemistry on Frozen Sections.**
**Immunohistochemistry on Paraffin Sections.**
**Immunoassay.**
**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 specifically with SAA-1, the major isoform of SAA in plasma.

**Species Reactivity:**

**Tested:** Human, Mouse.

**Storage:**

Store undiluted 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.
3. Wilkins, J et al; Rapid automated enzyme immunoassays of Serum Amyloid A. Clin Chem 1994, 40: 1284.
4. Hazenberg BP, Limburg PC, Bijzet J, van Rijswijk MH. A quantitative method for detecting deposits of amyloid A protein in aspirated fat tissue of patients with arthritis. Ann Rheum Dis. 1999 Feb;58(2):96-102. PubMed PMID: 10343524.