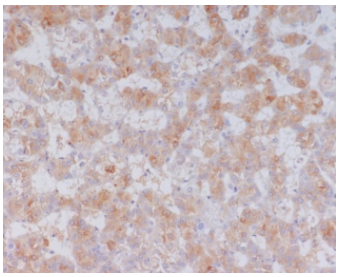
Serum Amyloid A Antibody / SAA [clone ABAE-19] (RQ5313)

Catalog No.	Formulation	Size
RQ5313	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

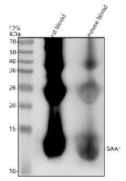
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ABAE-19
Purity	Affinity purified
UniProt	P0DJI8
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200
Limitations	This Serum Amyloid A antibody is available for research use only.



Immunohistochemistry analysis of Serum Amyloid A expression. Serum Amyloid A antibody staining was performed on formalin-fixed, paraffin-embedded human liver cancer tissue, showing DAB-positive cytoplasmic staining in tumor cells, with hematoxylin counterstaining.



Western blot analysis of SAA1 expression. Whole blood lysates from rat (lane 1) and mouse (lane 2) were analyzed by SDS-PAGE and immunoblotting using an anti-SAA1/Serum Amyloid A antibody. A prominent band is detected at approximately 12 kDa, corresponding to the observed apparent molecular weight of SAA1, which migrates below its predicted molecular weight of approximately 14 kDa. Additional higher molecular weight bands observed at approximately 25 kDa and 38 kDa likely represent oligomeric or lipid-associated forms of SAA commonly detected in blood-derived samples. Proteins were resolved on a 12% SDS-PAGE gel under reducing conditions, transferred to a nitrocellulose membrane, and visualized using HRP-based chemiluminescent detection.

Description

Serum Amyloid A antibody targets Serum Amyloid A, a highly inducible acute phase protein that plays a central role in systemic inflammatory responses. SAA proteins are encoded mainly by the SAA1 and SAA2 genes and are rapidly synthesized in the liver following stimulation by pro-inflammatory cytokines. Once secreted, Serum Amyloid A circulates bound to high-density lipoprotein particles, where it replaces apolipoprotein A1 during acute inflammation. This rapid and dynamic regulation makes SAA one of the most sensitive indicators of inflammatory activity in both experimental and pathological settings.

Functionally, Serum Amyloid A influences immune cell behavior and lipid metabolism during inflammation. A short functional summary is that SAA acts as an inflammation-responsive apolipoprotein that coordinates immune activation with changes in cholesterol transport. Through interactions with immune receptors, extracellular matrix components, and lipoproteins, Serum Amyloid A contributes to chemotaxis, cytokine modulation, and tissue remodeling in inflamed environments.

At the molecular level, Serum Amyloid A proteins are small, structurally flexible apolipoproteins that readily associate with membranes and lipoprotein complexes. Sustained elevation of SAA can lead to misfolding and deposition of amyloid fibrils derived from Serum Amyloid A, a pathological process underlying AA amyloidosis. SAA antibody reagents are therefore valuable tools for examining both acute inflammatory signaling and mechanisms of amyloid formation in chronic disease models.

From a biological and disease relevance perspective, Serum Amyloid A expression has been linked to a wide range of conditions including infection, autoimmune disease, cardiovascular disease, metabolic disorders, and cancer. Tissue and circulating SAA levels are frequently investigated as indicators of disease activity, prognosis, or therapeutic response. Because SAA responds rapidly to inflammatory cues, it is widely used in translational research focused on immune regulation and inflammatory burden.

Under physiological conditions, SAA expression is minimal, but it increases sharply during acute phase responses driven by cytokines such as interleukin-1 and interleukin-6. Serum Amyloid A antibodies from NSJ Bioreagents are supplied for research use to support investigations into inflammation biology, immune signaling, and amyloid-associated pathology.

Explore additional Immunology Antibodies for proteins involved in innate immunity, acute phase responses, inflammatory signaling, and host defense.

Application Notes

Optimal dilution of the Serum Amyloid A antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Serum Amyloid A / SAA1 was used as the immunogen for the Serum Amyloid A antibody.

Storage

Store the Serum Amyloid A antibody at -20oC.

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