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# **Recombinant Human Serum Amyloid A Protein**

Catalog No.	Size	Species	Protein Accession No.
230-00001	10, 50, 100 μg	Human	P02735

#### Synonyms

Serum amyloid A protein, SAA, serum amyloid A1.

#### Description

Serum amyloid A (SAA) proteins produced predominantly by the liver are a family of apolipoproteins associated with high-density lipoprotein (HDL) in plasma. Different isoforms of SAA are expressed constitutively at different levels or in response to inflammatory stimuli. Acute-phase serum amyloid A proteins are secreted during the acute phase of inflammation and implicated in several chronic inflammatory diseases, such amyloidosis, atherosclerosis, and rheumatoid arthritis.

## Preparation

The full-length of human SAA gene was cloned and expressed in Escherichia coli. The recombinant protein has an N-terminal 6×histidine tag and was purified by immobilized metal ion affinity chromatography (IMAC).

#### Source

Recombinant histidine-tagged protein, purified from E. coli.

#### Predicted Molecular Mass

~16.1 kDa with the 6×histidine tag.

#### **Formulation**

Liquid, clear solution. Supplied as a 0.2 µm filtered solution in phosphate-buffered saline (1x PBS) containing 3% BSA and 10% glycerol.

## **Solubility**

The product is soluble in the neutral buffer indicated above.

#### Storage

The protein is stable at -20 to -70 °C in a manual defrost freezer. Avoid repeated freeze-thaw cycles.

#### Purity

>95%, determined by SDS-PAGE and stained with Commassie blue.

## **Applications**

	Yes	No	Not Determined
ELISA	√		
Western blotting	√		
Dot blotting	1		
Protein array	1		
Others			√

**Note**: other applications are not tested yet. Optimal working conditions should be determined by each laboratory for each application.

## References

- Zhang N, et al. (2005). Serum amyloid A-luciferase transgenic mice: response to sepsis, acute arthritis, and contact hypersensitivity and the effects of proteasome inhibition. J. Immunol. 174 (12): 8125-34.
- Betts JC, et al. (1991). The human acute-phase serum amyloid A gene family: structure, evolution and expression in hepatoma cells. Scand. J. Immunol. 34 (4):
- Manley PN, et al. (2006). Rapid recycling of cholesterol: the joint biologic role of C-reactive protein and serum amyloid A. Med. Hypotheses 66 (4): 784-92.
- Uhlar CM, Whitehead AS (1999). Serum amyloid A, the major vertebrate acute-phase reactant. Eur. J. Biochem. 265 (2): 501-23.