

## 32-6549: SAA Human

**Application :** Functional Assay

**Alternative Name :**

Serum amyloid A protein which is a member of the SAA family is encoded by the SAA gene in humans. SAA is expressed by the liver and secreted in plasma. Serum amyloid A is the main acute phase reactant and apolipoprotein of the HDL complex. Elevated serum SAA protein levels may be linked with lung cancer. The level of Apo-SAA, which is ordinarily 1-5 g/ml in plasma, increases 500-1000 fold within 24 hours of an inflammatory stimulus and, under these conditions, is the most abundant HDL Apolipoprotein.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

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APO-SAA Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 104 amino acids and having a molecular mass of 11.7kDa. Recombinant Apo-SAA is a consensus SAA molecule corresponding to human Apo-SAA1a, except for the presence of an N-terminal methionine, the substitution of asparagine for aspartic acid at position 60, and arginine for histidine at position 71 (the latter two substituted residues are present in Apo-SAA2b). The Human APO-SAA is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 10 µg / 50 µg

**Purification :** Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Human SAA was lyophilized from a concentrated (1mg/ml) solution in 20mM Tris-HCl, pH 9.0 and 150mM NaCl.

**Content :** It is recommended to reconstitute the lyophilized SAA Human in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized Human SAA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Human SAA should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

**Amino Acid :** RSFFSFLGEA FDGARDMWRA YSDMREANYI GSDKYFHARG NYDAAKRGPG GVWAAEAISN ARENIQRFFG RGAEDSLADQ AANEWGRSGK DPNHFRPAGL PEKY.

### Application Note

The biological activity determined by its ability to down-regulate lipid biosynthesis in aortic smooth muscle cells. The effective concentration was found to be 4ÅµM.