9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

SAA1 Human

Serum Amyloid A (APO-SAA1) Human Recombinant
CYK0519

Product Overview

Name	SAA1 Human
Description	
Serum Amyloid A (APO-SAA1) Human Recombinant	
Accession (Primary)	P0DJI8
Synonyms	
Serum amyloid A protein, SAA, Amyloid protein A, Amyloid fibril protein AA, SAA1, SAA2, PIG4, TP53I4, MGC111216.	
Introduction	
SAA1 protein is an acute phase apolipoprotein reactant which is produced mostly by hepatocytes and under regulation of inflammatory cytokines. SAA1 (Serum amyloid A1) protein is produced mainly in the liver and circulates in low levels in the blood. The SAA1 seems to have a role in the immune system. SAA1 protein levels increase in the blood and other tissues under conditions of inflammation. SAA1 may facilitate the repair of injured tissues; it also acts as an antibacterial agent, and signals the migration of germ-fighting cells to sites of infection. SAA1 also functions as an apolipoprotein of the HDL complex. Elevated levels of SAA1 ultimately affect secondary amyloidosis, extracellular amassing of amyloid fibrils, resulting from a circulating precursor, in a variety of tissues and organs. The most widespread type of amyloidosis appears secondary to chronic inflammatory disease, mainly rheumatoid arthritis. The SAA1 cleavage product a designated amyloid protein A is deposited systemically as amyloid in vital organs such as the liver, spleen, and kidneys in chronic inflammatory diseases patients. These deposits are extremely insoluble and resistant to proteolysis; they disrupt tissue structure and compromise performance.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
SAA1 was lyophilized from a 0.2 μm filtered concentrated solution in 20mM Tris-HCl, pH 9.0 and 150mM NaCl.	
Stability	
Lyophilized SAA1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SAA1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	

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Purity

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

Amino acid sequence

RSFFSFLGEA FDGARDMWRA YSDMREANYI GSDKYFHARG NYDAAKRGPG GVWAAEAISD ARENIQRFFG HGAEDSLADQ AANEWGRSGK DPNHFRPAGL PEKY.

Biological Activity

The biological activity determined by a chemoattract bioassay using human monocytes is in a concentration range of 10-100 ng/ml.

Solubility

It is recommended to reconstitute the lyophilized SAA1 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

SAA1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P0DJI8)