

32-1739: SAA1 Recombinant Protein

Alternative Name : Serum amyloid A protein,SAA,Amyloid protein A,Amyloid fibril protein AA,SAA1,SAA2,PIG4,TP53I4,MGC111216.

Description

Source : Escherichia Coli. SAA1 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. The SAA1 is purified by proprietary chromatographic techniques. 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.

Product Info

Amount :	50 µg
Purification :	Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content :	SAA1 was lyophilized from a 0.2µm filtered concentrated solution in 20mM Tris-HCl, pH 8.5 and 150mM NaCl.
Storage condition :	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.
Amino Acid :	RSFFSFLGEA FDGARDMWRA YSDMREANYI GSDKYFHARG NYDAAKRGPG GVWAAEAISD ARENIQRFFG HGAEDSLADQ AANEWGRSGK DPNHFRPAGL PEKY.

Application Note

It is recommended to reconstitute the lyophilized SAA1 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The biological activity determined by a chemoattract bioassay using human monocytes is in a concentration range of 10-100 ng/ml.