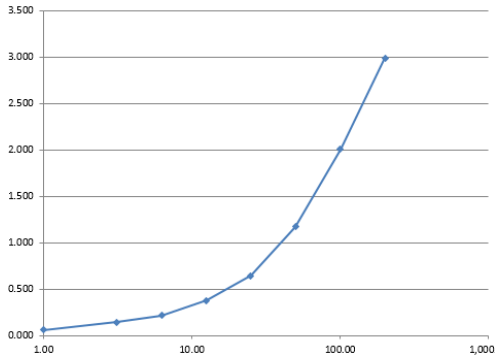
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	SAA-1, Human, clone Reu86.1		
Catalog number	HM2100-500UG		
Lot number	-	**Expiry date**	-
Volume	-	**Amount**	500 µg
Formulation	0.2 µm filtered in PBS	**Concentration**	>0.5 mg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #						1		
Yes	●	●				●		●
No								
N.D.			●	●	●		●	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IA: Immuno assay with HM2100 as detection antibody. HM2100 was biotinylated for this experiment.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: A reduced sample treatment and SDS-Page was used. The band size is 12kDa.
- IA: HM2100 can be used as a detection antibody.

General Information

Description

The serum amyloid A (SAA) family comprises a number of differentially expressed apolipoproteins, acute-phase SAA1 and SAA2, the former being the major component in plasma, and constitutive SAAs (C-SAAs). Although the liver is the primary site of synthesis of both SAA types extrahepatic production has been reported. The in vivo concentrations increase by as much as 1000-fold during inflammation. Several studies have stressed its importance in the diagnosis and monitoring of various diseases. Pathological SAA values are often detected in association with normal CRP concentrations; SAA rises earlier and more sharply than CRP. Recently, a broader view of SAA expression and function has been emerging. Expression studies show production of SAA proteins in histologically normal, atherosclerotic, Alzheimer, inflammatory, and tumor tissues. SAA has been found to have binding sites for high density lipoproteins, calcium, laminin, and heparin/heparan-sulfate. Also adhesion motifs were identified and new functions, affecting cell adhesion, migration, proliferation and aggregation discovered. These findings emphasize the importance of SAA in various physiological and pathological processes, including inflammation, atherosclerosis, thrombosis, AA-amyloidosis, rheumatoid arthritis, and neoplasia. SAA has also a number of immunomodulatory roles, it can induce chemotaxis and adhesion molecule expression, has cytokine-like properties and can promote the upregulation of metalloproteinases. It enhances the binding of high-density lipoprotein to macrophages and thus helps in the delivery of lipids to sites of injury for use in tissue repair. It is thus thought to be an integral part of the disease processes. In addition, recent experiments suggest that SAA may play a "housekeeping" role in normal human tissues. Elevated

levels of SAA over time predispose to secondary amyloidosis, extracellular accumulation of amyloid fibrils, derived from a circulating precursor, in various tissue and organs. The most common form of amyloidosis occurs secondary to chronic inflammatory disease, particularly rheumatoid arthritis. The antibody is raised against human SAA and Helix Pomatia Haemocyanine. It reacts specifically with SAA-1, the major isoform of SAA in plasma.

Immunogen Apo-SAA coupled to Helix Pomatia Haemocyanine (Ref.1).

Aliases Serum amyloid A-1 protein

Gene Gene name: SAA1

References

1. Hazenberg, B et al; Monoclonal antibody based ELISA for human SAA. Amyloid and Amyloidosis, eds. LB Natvig et al, Kluwer Acad Publ 1990: 898
2. Wilkins, J et al; Rapid automated enzyme immunoassays of Serum Amyloid A. Clin Chem 1994, *40*: 1284
3. Hazenberg, B et al; A quantitative method for detecting deposits of amyloid A protein in aspirated fat tissue of patients with arthritis. Ann Rheum Dis 1999, *58*: 96

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	05/11/2019

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.