abcam

Product datasheet

Mouse SAA ELISA Kit ab215090

Recombinant SimpleStep ELISA

1 References 4 Images

Overview

Product name Mouse SAA ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	5			5.5%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			8.3%

Sample type Serum, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 39 pg/ml

Range 0.22 ng/ml - 2.5 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	122	119% - 125%
EDTA Plasma	113	111% - 114%
Cit plasma	127	124% - 129%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Mouse
Does not react with: Cow

Product overview Mouse SAA ELISA Kit (ab215090) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of SAA protein in cit plasma, edta plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse SAA with 39 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes

Mouse SAA1 (serum amyloid A-1 protein) is a secreted 102 amino acid, acute phase protein encoded by the Saa1 gene. The SAA proteins are a family of apolipoproteins that are associated with high-density lipoprotein (HDL). Four SAA isoforms have been currently characterized in mice; SAA1 shares 91%, 70%, and 54% sequence identify with mouse SAA2, SAA3, and SAA4, respectively. SAA1 and SAA2 are expressed primarily by the liver and are regulated by the cytokines IL-1, IL-6 and TNF-α, and the levels can increase as much as 1000 fold during inflammation. SAA1 is also associated with certain cancers, atherosclerosis, and rheumatoid arthritis. SAA1 is a precursor of amyloid A, fibril deposits of which may result in inflammatory amyloidosis.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

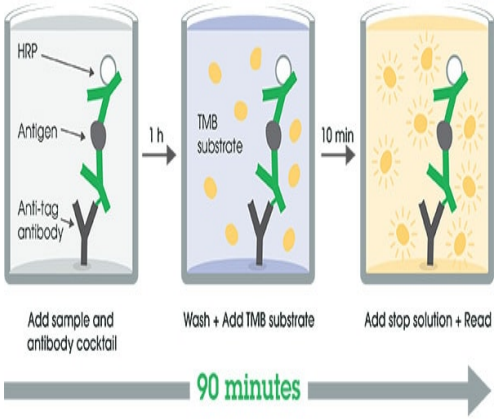
Components	1 x 96 tests	1 x 96 tests
10X Mouse SAA Capture Antibody	1 x 600µl	1 x 600µl
10X Mouse SAA Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent CPR2	0 x 0ml	0 x 0ml
Mouse SAA Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit

Components	1 x 96 tests	1 x 96 tests
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

Relevance

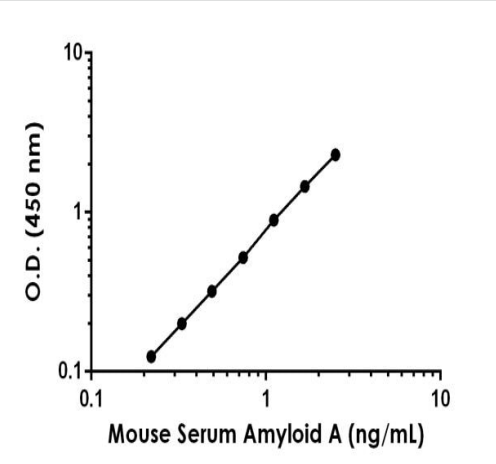
Function: Major acute phase reactant. Apolipoprotein of the HDL complex. Tissue specificity: Expressed by the liver; secreted in plasma. Disease: Note=Reactive, secondary amyloidosis is characterized by the extracellular accumulation in various tissues of the SAA protein. These deposits are highly insoluble and resistant to proteolysis; they disrupt tissue structure and compromise function. Note=Elevated serum SAA protein levels may be associated with lung cancer. Similarity: Belongs to the SAA family. PTM: This protein is the precursor of amyloid protein A, which is formed by the removal of approximately 24 residues from the C-terminal end.

Images



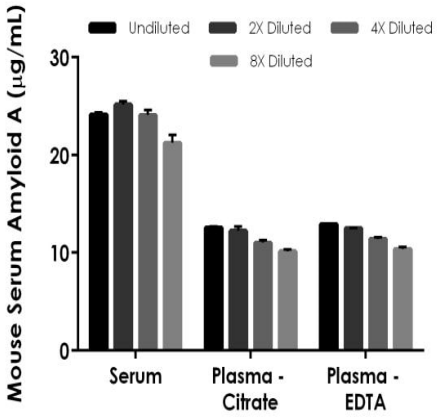
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Other - Mouse SAA ELISA Kit (ab215090)



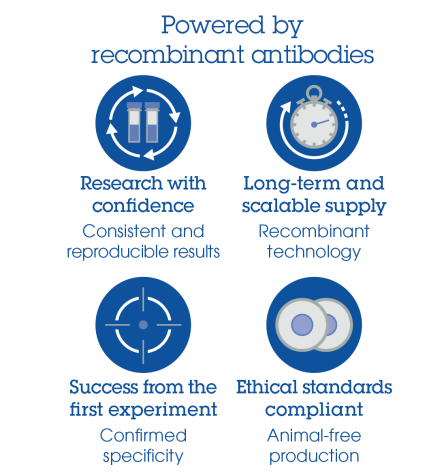
Background-subtracted data values (mean +/- SD) are graphed.

Mouse SAA standard curve.



Interpolated concentrations of native SAA in mouse serum and plasma samples.

The concentrations of serum amyloid A were measured in duplicate, interpolated from the serum amyloid A standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:6000, plasma (citrate) 1:3750, and plasma (EDTA) 1:3750. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean serum amyloid A concentration was determined to be 23.7 µg/mL in serum, 11.5 µg/mL in plasma (citrate) and 11.8 µg/mL in plasma (EDTA).



Sandwich ELISA - Mouse SAA ELISA Kit (ab215090)

To learn more about the advantages of recombinant antibodies see **here**.

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