abcam

Product datasheet

Mouse SAP ELISA Kit (PTX2) ab213888

1 Image

Overview

Product name Mouse SAP ELISA Kit (PTX2)

Detection methodColorimetric

Precision

Sample	n	Mean	SD	CV%
1	16	3.608ng/ml	0.144	= 4%
2	16	12.778ng/ml	0.715	= 5.6%
3	16	47.613ng/ml	2.809	= 5.9%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
1	24	3.726ng/ml	0.176	= 4.7%
2	24	13.449ng/ml	0.981	= 7.3%
3	24	43.062ng/ml	2.626	= 6.1%

Sample type Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma

Assay type Sandwich (quantitative)

Sensitivity < 50 pg/ml

Range 1.56 ng/ml - 100 ng/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Mouse

Product overview The Mouse SAP Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213888) is designed for

the quantitative measurement of Mouse SAP in cell culture supernatants, cell lysates, serum and

plasma (heparin, EDTA).

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A

monoclonal antibody from rat specific for SAP has been pre-coated onto 96-well plates. Standards (Expression system for standard: NSO; Immunogen sequence: Q21- D224) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for SAP is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Mouse Serum Amyloid P / SAP amount of sample captured in plate.

Notes

SAP also known as PTX2 or APCS, is the identical serum form of amyloid P component (AP), a 25kDa pentameric protein first identified as the pentagonal constituent of *in vivo* pathological deposits called "amyloid". It belongs to the pentraxins family, characterized by calcium dependent ligand binding and distinctive flattened beta-jellyroll structure similar to that of the legume lectins. This gene is mapped to 1q23.2. The binding of the encoded protein to proteins in the pathological amyloid cross-beta fold suggests its possible role as a chaperone. This protein is also thought to control the degradation of chromatin. It has been demonstrated that this protein binds to apoptotic cells at an early stage, which raises the possibility that it is involved in dealing with apoptotic cells *in vivo*.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-Mouse SAP coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti- Mouse SAP antibody		1 x 100µl
Lyophilized recombinant Mouse SAP standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

Function

Can interact with DNA and histones and may scavenge nuclear material released from damaged circulating cells. May also function as a calcium-dependent lectin.

Tissue specificity

Found in serum and urine.

Involvement in disease Note=SAP is a precursor of amyloid component P which is found in basement membrane and

associated with amyloid deposits.

Sequence similarities Belongs to the pentaxin family.

Contains 1 pentaxin domain.

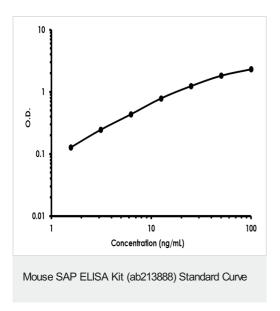
Post-translational modifications

N-glycosylated with a complex biantennary oligosaccharide chain with a sialic acid at the end

(disialo-SAP). Monosialo-SAP as well as asioalo-SAP are also detected (PubMed:15174148).

Cellular localization Secreted.

Images



Mouse Serum Amyloid P / SAP ELISA Kit (ab213888) Standard Curve.

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