



Product datasheet

Rat alpha 2 Macroglobulin ELISA Kit ab157730

2 References 2 Images

Overview

Product name Rat alpha 2 Macroglobulin ELISA Kit

Detection method Colorimetric

Precision					Intra-assay
	Sample	n	Mean	SD	CV%
	Overall				< 10%

					Inter-assay
	Sample	n	Mean	SD	CV%
	Overall				< 10%

Sample type Serum, Plasma, Other biological fluids

Assay type Sandwich (quantitative)

Sensitivity 2.23 ng/ml

Range 6.25 ng/ml - 400 ng/ml

Recovery				Sample specific recovery
	Sample type	Average %		Range
	Serum	> 85		% - %

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Rat

Product overview Abcam's alpha 2 Macroglobulin Rat ELISA Kit is highly sensitive two-site enzyme linked immunoassay (ELISA) for the quantitative measurement of alpha 2 Macroglobulin in rat biological samples. This kit is specific to the alpha 2 Macroglobulin and will not cross react with the closely related alpha 1 Macroglobulin.

In this assay the alpha 2 Macroglobulin present in samples reacts with the anti-alpha 2 Macroglobulin antibodies which have been adsorbed to the surface of polystyrene microtitre wells. After the removal of unbound proteins by washing, anti-alpha 2 Macroglobulin antibodies conjugated with horseradish peroxidase (HRP) are added. These enzyme-labeled antibodies form complexes with the previously bound alpha 2 Macroglobulin. Following another washing step,

the enzyme bound to the immunosorbent is assayed by the addition of a chromogenic substrate, 3,3',5,5'-tetramethylbenzidine (TMB). The quantity of bound enzyme varies directly with the concentration of alpha 2 Macroglobulin in the sample tested; thus, the absorbance, at 450 nm, is a measure of the concentration of alpha 2 Macroglobulin in the test sample. The quantity of alpha 2 Macroglobulin in the test sample can be interpolated from the standard curve constructed from the standards, and corrected for sample dilution

Platform Microplate

Properties

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

Components	1 x 96 tests
100X HRP-conjugated anti-rat alpha 2 Macroglobulin antibody	1 x 150µl
20X Wash Buffer Concentrate	1 x 50ml
5X Diluent Concentrate	1 x 50ml
Chromogen Substrate Solution	1 x 12ml
Rat alpha 2 Macroglobulin Calibrator (lyophilized)	1 vial
Rat alpha 2 Macroglobulin ELISA Microplate	1 unit
Stop Solution	1 x 12ml

Function Is able to inhibit all four classes of proteinases by a unique 'trapping' mechanism. This protein has a peptide stretch, called the 'bait region' which contains specific cleavage sites for different proteinases. When a proteinase cleaves the bait region, a conformational change is induced in the protein which traps the proteinase. The entrapped enzyme remains active against low molecular weight substrates (activity against high molecular weight substrates is greatly reduced). Following cleavage in the bait region a thioester bond is hydrolyzed and mediates the covalent binding of the protein to the proteinase.

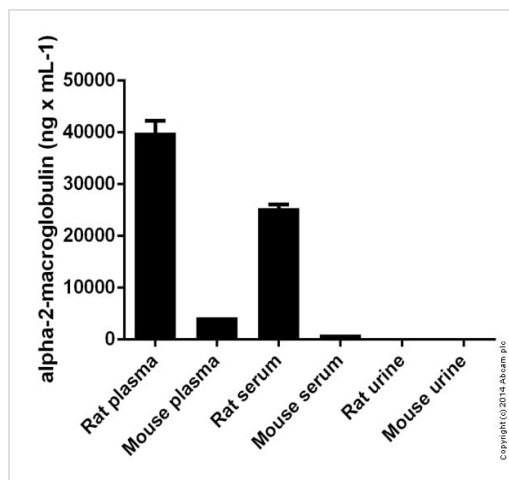
Tissue specificity Secreted in plasma.

Sequence similarities Belongs to the protease inhibitor I39 (alpha-2-macroglobulin) family.

Developmental stage Contrary to the rat protein, which is an acute phase protein, this protein is always present at high levels in circulation.

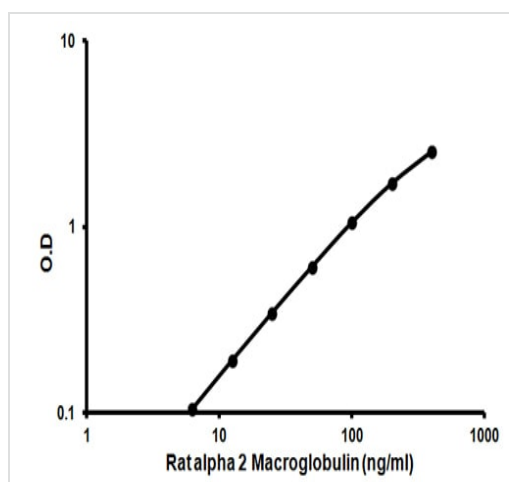
Cellular localization Secreted.

Images



alpha-2-macroglobulin measured in various samples showing quantitie (ng) per mL of tested sample

Sandwich ELISA - ab157730 alpha 2 Macroglobulin
Rat Elisa kit



Representative standard curve using ab157730 alpha 2 Macroglobulin Rat ELISA Kit.

Standard Curve

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