

Datasheet for KOA0638**Human A2M-alpha2-Macroglobulin ELISA Kit****Overview**

Description:	Human A2M/alpha2-Macroglobulin AccuSignal ELISA Kit - KOA0638
Item No.:	KOA0638
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	625 pg/ml - 40,000 pg/ml

Product Details

Background:	Alpha-2-macroglobulin, also known as A2M or CPAMD5 is a large plasma protein found in the blood. This gene is mapped to 12p13.31. Alpha-2-macroglobulin is a protease inhibitor and cytokine transporter. It inhibits many proteases, including trypsin, thrombin and collagenase. A2M is implicated in Alzheimer disease(AD) due to its ability to mediate the clearance and degradation of A-beta, the major component of beta-amyloid deposits. This gene 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.
Synonyms:	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, A2m, A2MD, A2MG_HUMAN, Alpha-2-M, Alpha-2-macroglobulin, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, CPAMD5, FWP007, Pregnancy zone protein, S863-7
Detection Kit Type:	ELISA Kit
Detection Range:	625 pg/ml - 40,000 pg/ml
Sensitivity:	<20 pg/ml

Target Details

Gene Name:	A2M
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Reactivity:	Human
Immunogen:	from human plasma
Purity/Specificity:	Natural human A2M. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P01023 • NCBI - NP_000005.2 • GeneID - 2 • KOA0638 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 40,000pg/ml, 20,000pg/ml, 10,000pg/ml, 5,000pg/ml, 2,500pg/ml, 1,250pg/ml, 625pg/ml human A2M standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. It is recommended that each human A2M standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Detection Range: 625 pg/ml - 40,000 pg/ml Sensitivity <20 pg/ml DOE: @4° 04/20/2023 @-20° 10/20/2023

Formulation

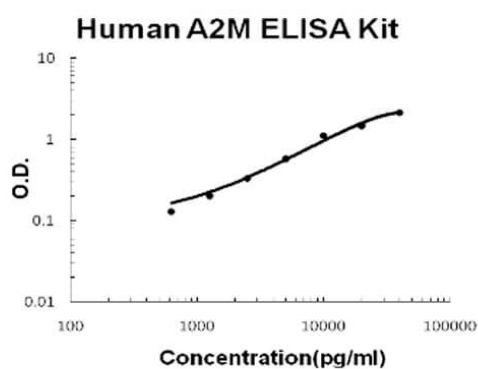
Concentration:	1 Kit
Anticoagulant:	Heparin Sodium

Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
Expiration:	See kit insert for complete instructions.

Images



ELISA

Human A2M/alpha2-Macroglobulin AccuSignal ELISA Kit standard curve. Assay Range: 625pg/ml-40,000pg/ml. Sensitivity: <20pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.