

Human A2M,Alpha2-Macroglobulin ELISA Kit

Catalog No: #EK5479



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Description

Product Name	Human A2M,Alpha2-Macroglobulin ELISA Kit
Specificity	Human
Crossing Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen Type	from human plasma
Other Names	Alpha-2-macroglobulin; Alpha-2-M; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5; A2M; CPAMD5; FWP007;
Accession No.	P01023
Uniprot	P01023
GeneID	2;
Cell Localization	Secreted.

Application Details

sensitivity:20pg mlDetect Range:625pg ml-40 000pg ml
sample_type:cell culture supernates cell lysates tissue homogenates serum and plasma (heparin EDTA).
capture_antibody:monoclonal antibody from mouse
detection_antibody:polyclonal antibody from goat
gene_name:A2Mprotein_name:Alpha-2-macroglobulintissue_specificity: Secreted in plasma.
sequence_similarities:Belongs to the protease inhibitor I39 (alpha-2- macroglobulin) family.
tmb_incubation:15-20minresearch_category:immunology|innate immunity|complement|cell biology|proteolysis / ubiquitin|protease inhibitors protease inhibitors

Product Description

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human A2M,alpha2-Macroglobulin

Background

protein_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. 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.

Note: This product is for in vitro research use only