

Alpha 2 Macroglobulin, Human Plasma recombinant protein
C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, A2M, CPAMD5, FWP007
Catalog # PBV10920r

Specification

Alpha 2 Macroglobulin, Human Plasma recombinant protein - Product info

Primary Accession	P01023
Calculated MW	725 kDa (Homotetramer, Subunit size: 180 kDa) KDa

Alpha 2 Macroglobulin, Human Plasma recombinant protein - Additional Info

Gene ID	2
Gene Symbol	A2M
Other Names	
C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, A2M, CPAMD5, FWP007	
Gene Source	Human
Source	Human Plasma
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	No
Target/Specificity	
Alpha 2 Macroglobulin	

Application Notes

In water or aqueous buffer

Format

Lyophilized

Storage

-20°C; Lyophilized from 30 mM Na Phosphate, pH 7.0, with glycine as a stabilizer.

Alpha 2 Macroglobulin, Human Plasma recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Alpha 2 Macroglobulin, Human Plasma recombinant protein - Images

Alpha 2 Macroglobulin, Human Plasma recombinant protein - Background

Alpha 2 macroglobulin (A2M) is a major serum protein found at concentrations of 240 mg per 100 ml in men and 290 mg per 100 ml in women. It functions as a broad-spectrum protease-binding protein. It is produced by the liver, and is a major component of the alpha-2 band in protein electrophoresis. It is a large plasma glycoprotein that has long been known as an irreversible inhibitor of a variety of proteinases. More recently, it has been reported that numerous growth factors, cytokines and hormones bind to alpha 2M through diverse mechanisms. A2M is also produced in the brain where it binds multiple extracellular ligands and is internalized by neurons and astrocytes. In the brain of Alzheimer's disease (AD) patients, A2M has been localized to diffuse amyloid plaques. A2M also binds soluble beta-amyloid, of which it mediates degradation. Protease-conjugated alpha2-macroglobulin is selectively bound by cells contacting the body fluids and alpha2-macroglobulin and its protease cargo are then internalized and degraded in secondary lysosomes of those cells. In addition to this function as an agent for protease clearance, Alpha2-macroglobulin binds a variety of other ligands, including several peptide growth factors and modulates the activity of a lectin-dependent cytolytic pathway in arthropods. Multifunctional, it promotes growth of mammalian cells in culture, stimulates the regeneration of lymphocytes in irradiated mice, possesses a transport function for zinc and is a proteinase inhibitor that controls the clotting and fibrinolytic system. Clinically levels are increased in liver cirrhosis, nephrotic syndrome, diabetes, and severe burn cases.

Alpha 2 Macroglobulin, Human Plasma recombinant protein - References

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