

**Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated**  
**Alpha-2-Macroglobulin Antibody Peroxidase Conjugated**  
Catalog # ASR3982**Specification****Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated**  
**- Product Information**

Host	Goat
Conjugate	Peroxidase (Horseradish)
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-Alpha 2-Macroglobulin has been tested by dot blot and western blot and is suitable to be assayed against 1.0 ug of alpha-Macroglobulin [Human Plasma] in a standard capture ELISA using ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:12,000 to 1:60,000 of the reconstitution concentration is suggested for this product.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	a2-Macroglobulin [Human Plasma]
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

**Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated**  
**- Additional Information****Gene ID 2****Other Names**

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**Purity**

Anti-Alpha 2-Macroglobulin is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum as well as purified and partially purified a2-Macroglobulin [Human Plasma]. Cross reactivity

against a2-Macroglobulin from other sources is unknown.

#### **Storage Condition**

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### **Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - Protein Information**

**Name** A2M

**Synonyms** CPAMD5

#### **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.

#### **Cellular Location**

Secreted.

#### **Tissue Location**

Secreted in plasma..

### **Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - 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](#)

### **Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - Images**

### **Anti-Alpha-2-MACROGLOBULIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - Background**

Alpha 2-Macroglobulin is the largest major nonimmunoglobulin protein in plasma. The alpha

2-macroglobulin molecule is synthesized mainly in liver, but also locally by macrophages, fibroblasts, and adrenocortical cells. Alpha 2 macroglobulin acts as an antiprotease and is able to inactivate an enormous variety of proteinases. It functions as an inhibitor of fibrinolysis by inhibiting plasmin and kallikrein. It functions as an inhibitor of coagulation by inhibiting thrombin. Alpha 2-macroglobulin may act as a carrier protein because it also binds to numerous growth factors and cytokines, such as platelet-derived growth factor, basic fibroblast growth factor, TGF- $\beta$ , insulin, and IL-1 $\beta$ .

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.