

Datasheet for 100-101-207**Alpha-2-Macroglobulin Antibody****Overview**

Description:	Anti-Alpha-2-Macroglobulin (Human Plasma) (GOAT) Antibody - 100-101-207
Item No.:	100-101-207
Size:	2 mL
Applications:	WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Alpha-2-Macroglobulin is able to inhibit all four classes of proteinases by a unique 'trapping' mechanism. Alpha-2-Macroglobulin 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:	goat anti-Alpha-2-Macroglobulin Antibody, goat anti-A2M antibody, Alpha 2 M antibody, Alpha 2M antibody, CPAMD5 antibody, DKFZp779B086 antibody, FWP007 antibody, S863 7 antibody, Alpha-2-M, PZP-like alpha-2-macroglobulin domain-containing protein 5
Host Species:	Goat
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	A2M
Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	a2-Macroglobulin [Human Plasma]

Purity/Specificity: This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified α 2-Macroglobulin [Human Plasma]. Cross reactivity against α 2-Macroglobulin from other sources is unknown.

Relevant Links:

- [UniProtKB - P01023](#)
- [NCBI - NP_000005.2](#)
- [GeneID - 2](#)

Application Details

Tested Applications: WB

Application Note: Anti-Alpha-2-Macroglobulin has been tested by western blot and is suitable to be assayed against 1.0 ug of α 2-Macroglobulin [Human Plasma] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Goat) code #611-1302 and (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 1:32,000 to 1:160,000 of the reconstitution concentration is suggested for this product.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:20,000 - 1:100,000

IHC: 1:500 - 1:2,500

WB: 1:2,000 - 1:10,000

Formulation

Physical State: Lyophilized

Concentration: 82 mg/mL by Refractometry

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

Stabilizer: None

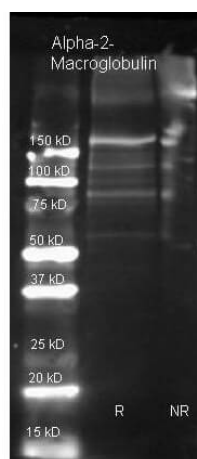
Reconstitution Volume: 2.0 mL

Reconstitution Buffer: Restore with deionized water (or equivalent)

Shipping & Handling

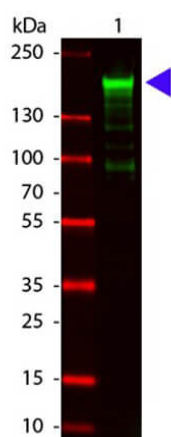
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Rockland Goat anti Alpha-2-Macroglobulin (200-101-207 lot 20172) was used to detect Alpha-2-Macroglobulin under reducing (R) and non-reducing (NR) conditions. Reduced samples of purified target proteins contained 4% BME and were boiled for 5 minutes. Samples of ~1µg of protein per lane were run by SDS-PAGE. Protein was transferred to nitrocellulose and probed with 1:3000 dilution of primary antibody (ON 4 C in MB-070). Detection shown was using Dylight 649 conjugated Donkey anti goat (605-743-125 lot 20834 1:10K in TBS/MB-070) 1 hr RT. Images were collected using the BioRad VersaDoc System.



Western Blot

Western Blot of Goat anti-Alpha-2-Macroglobulin Antibody. Lane 1: Alpha-2-Macroglobulin. Load: 100 ng per lane. Primary antibody: Alpha-2-Macroglobulin antibody at 1:1000 for overnight at 2-8°C. Secondary antibody: DyLight™ 800 goat secondary antibody at 1:20,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 163 kDa, 178 kDa for Alpha-2-Macroglobulin. Other band(s): Alpha-2-Macroglobulin splice variants and isoforms.

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.