Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-103-207

Alpha-2-Macroglobulin Antibody Peroxidase Conjugated

Overview

Description:	Anti-Alpha-2-Macroglobulin (Human Plasma) (GOAT) Antibody Peroxidase Conjugated (BULK ORDER) - 200-103-207
Item No.:	200-103-207
Size:	20 mg
Applications:	Dot Blot, WB
Reactivity:	Human
Host Species:	Goat

Product Details

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-β, insulin, and IL-1β. 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:	goat anti-Alpha-2-Macroglobulin Antibody HRP Conjugation, Peroxidase Conjugated goat anti-Alpha-2-Macroglobulin Antibody, A2M antibody, Alpha 2 M antibody, Alpha 2M antibody, CPAMD5 antibody, DKFZp779B086 antibody, FWP007 antibody, S863 7 antibody
Host Species:	Goat
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	A2M
Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	a2-Macroglobulin [Human Plasma]
Purity/Specificity:	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.
Relevant Links:	• UniProtKB - P01023 • NCBI - P01023.3 • GeneID - 2

Application Details

Tested Applications:	Dot Blot, WB
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:20,000
IHC:	1:500 - 1:2,500
WB:	1:1,000 - 1:5,000

Formulation

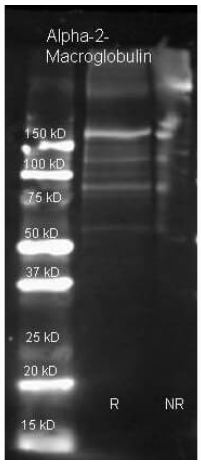
Physical State:	Lyophilized
Concentration:	10.0 mg/mL by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
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 antibody (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 ~1ug 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.

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.