

Datasheet for ABIN103762

anti-alpha 2 Macroglobulin antibody

3 Images

1 Publication



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Overview

Quantity:	100 µg
Target:	alpha 2 Macroglobulin (A2M)
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This alpha 2 Macroglobulin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	Alpha-2-Macroglobulin Antibody
Immunogen:	Immunogen: a2-Macroglobulin [Human Plasma] Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum as well as purified and partially purified a2-Macroglobulin [Human Plasma].
Characteristics:	Synonyms: goat anti-Alpha-2-Macroglobulin Antibody, A2M antibody, Alpha 2 M antibody, Alpha 2M antibody, CPAMD5 antibody, DKFZp779B086 antibody, FWP007 antibody, S863 7 antibody
Purification:	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.

Target Details

Target:	alpha 2 Macroglobulin (A2M)
Alternative Name:	A2M (A2M Products)
Background:	<p>Background: Alpha-2-Macroglobulin detects Macroglobulin. Alpha-2-MACROGLOBULIN is a large plasma protein found in the blood. It is produced by the liver, and is a major component of the alpha-2 band in protein electrophoresis. 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. No specific deficiency with associated disease has been recognized, and no disease state is attributed to low concentrations of Alpha 2 macroglobulin. The concentration of alpha 2 macroglobulin rises 10-fold or more in the nephrotic syndrome when other lower molecular weight proteins are lost in the urine. The loss of alpha 2 macroglobulin into urine is prevented by its large size. The net result is that alpha 2 macroglobulin reaches serum levels equal to or greater than those of albumin in the nephrotic syndrome, which has the effect of maintaining oncotic pressure. Antialpha-2-macroglobulin is ideal for investigators involved in serum component protein research.</p>
Gene ID:	2
NCBI Accession:	NP_000005
UniProt:	P01023
Pathways:	Lipid Metabolism

Application Details

Application Notes:	<p>Immunohistochemistry Dilution: User Optimized</p> <p>Application Note: Anti-alpha-2-macroglobulin antibody has been tested by western blot and is suitable for ELISA and Immunohistochemistry applications. Anti-alpha-2-MACROGLOBULIN antibody should be optimized by the end user for the specific reactive conditions.</p> <p>Western Blot Dilution: 1:2,000 - 1:20,000</p> <p>ELISA Dilution: 1:80,000 - 1:400,000</p> <p>Other: User Optimized</p>
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Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution Volume: 100 µL
Reconstitution Buffer: Restore with deionized water (or equivalent)

Concentration: 10.0 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: None
Preservative: 0.01 % (w/v) Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

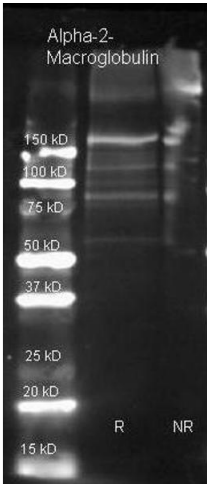
Storage: 4 °C, -20 °C

Storage Comment: 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.

Expiry Date: 12 months

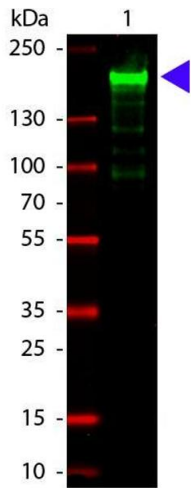
Publications

Product cited in: Chung, Hsu, Chen, Liu, Chang, Li, Huang, Shieh, Lee: "Association of salivary alpha 2-macroglobulin levels and clinical characteristics in type 2 diabetes." in: **Journal of diabetes investigation**, Vol. 7, Issue 2, pp. 190-6, (2017) ([PubMed](#)).



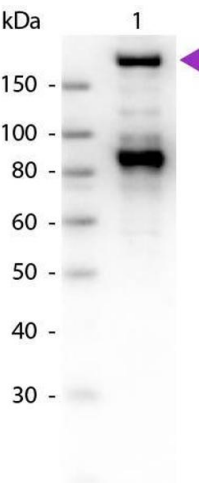
Western Blotting

Image 1. Goat anti Alpha-2-Macroglobulin antibody 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 ABIN925618). Detection shown was using Dylight 649 conjugated Donkey anti goat (605-743-125 lot 20834 1:10K in TBS/ABIN925618) 1 hr RT. Images were collected using the BioRad VersaDoc System.



Fluorescence Western

Image 2.



Western Blotting

Image 3. Western Blot of Goat Anti-Alpha-2-Macroglobulin antibody. Lane 1: Alpha-2-Macroglobulin. Lane 2: None. Load: 50 ng per lane. Primary antibody: Alpha-2-Macroglobulin antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase goat secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 163 kDa, 163 kDa for Alpha-2-Macroglobulin. Other band(s): Alpha-2-Macroglobulin splice variants and isoforms.