

Anti-alpha 2 Macroglobulin Antibody [A2M/3622] (A277584)

Specifications:

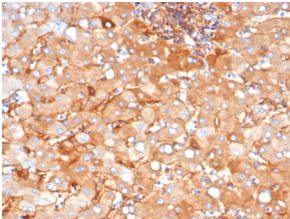
Name:	Anti-alpha 2 Macroglobulin Antibody [A2M/3622]
Description:	Mouse monoclonal [A2M/3622] antibody to alpha 2 Macroglobulin.
Specificity:	$\hat{I}\pm$ -2-Macroglobulin ($\hat{I}\pm$ -2M) is a homotetrameric serum protein consisting of four identical subunits that form dimers through disulfide bonds. Initially, $\hat{I}\pm$ -2M was characterized as a pan-proteinase inhibitor that was able to bait proteinases into cleaving specific peptide sequences on $\hat{I}\pm$ -2M. This interaction induces a conformational change in $\hat{I}\pm$ -2M, thus enabling it to trap the proteinase and further inhibit its activity. Subsequently, $\hat{I}\pm$ -2M has been shown to function as a carrier protein and regulator of cytokines during inflammation. Circulating transforming growth factor \hat{I}^2 (TGF \hat{I}^2) in serum is primarily bound to $\hat{I}\pm$ -2M, which renders TGF \hat{I}^2 inactive. $\hat{I}\pm$ -2M also binds to IL-6 and, thereby, increases the concentration of IL-6 near lymphocytes, hepatocytes and stem cells involved in mediating the inflammatory cascade. Mutations and deletions in the gene encoding $\hat{I}\pm$ -2M are associated with an increased incidence of Alzheimer s disease (AD), which is consistent with the role of $\hat{I}\pm$ -2M in mediating the clearance and degradation of A \hat{I}^2 , the major component of \hat{I}^2 -Amyloid deposits accumulated during AD.
Applications:	IHC-P
Recommended Dilutions:	IHC-P: 1-2 μ g/ml
Reactivity:	Human
Immunogen:	Recombinant fragment, around amino acids 604-748, of human alpha 2 Macroglobulin. The exact sequence is proprietary.
Host:	Mouse
Clonality:	Monoclonal
Clone ID:	A2M/3622
Isotype:	IgG2b
Light Chains:	kappa
Conjugate:	Unconjugated
Purification:	Protein A/G chromatography.
Concentration:	200 μ g/ml
Product Form:	Liquid
Formulation:	Supplied in 10mM Phosphate Buffered Saline with 0.05% BSA and 0.05% Sodium Azide.

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Specifications continued:

Storage:	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
General Notes:	This monoclonal antibody is also available in a different formulation without BSA and Sodium Azide - Anti-alpha 2 Macroglobulin Antibody [A2M/3622] - BSA and Azide free (A278172).
Disclaimer:	This product is for research use only. It is not intended for diagnostic or therapeutic use.

Images:



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human liver tissue using Anti-alpha 2 Macroglobulin Antibody [A2M/3622].



Analysis of protein array containing more than 19,000 full-length human proteins using Anti-alpha 2 Macroglobulin Antibody [A2M/3622]. Z-Score and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target; a MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.