Alpha-2-Macroglobulin / A2M Antibody

Mouse Monoclonal Antibody [Clone A2M/6556]

Catalog No	Format	Size
2-MSM16-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2-MSM16-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2-MSM16-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

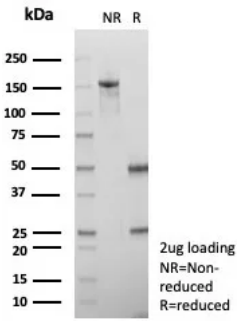
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	A2M/6556
Gene Name	A2M
Immunogen	Human recombinant A2M protein fragment (around aa 604-748) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	185kDa
Cellular Localization	Secreted in plasma
Species Reactivity	Human
Positive Control	Human liver or placenta tissues.

**Optimal dilution for a specific application should be determined.*

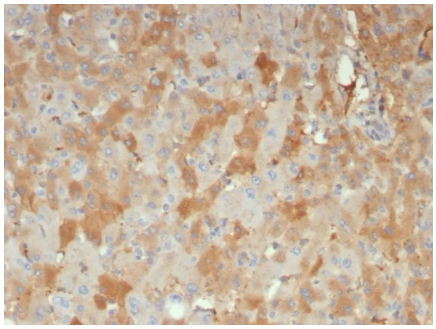
Product Images for Alpha-2-Macroglobulin / A2M Antibody



SDS-PAGE Analysis of Purified Alpha-2-Macroglobulin Mouse Monoclonal Antibody (A2M/6556). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing Alpha-2-Macroglobulin Mouse Monoclonal Antibody (A2M/6556). Z- 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 HuProtTM 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 HuProtTM 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 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.



Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained withAlpha-2-Macroglobulin Mouse Monoclonal Antibody (A2M/6556). HIER: Tris/EDTA, pH9.0, 45min. 2: HRP-polymer, 30min. DAB, 5min.

Specificity & Comments

?-2-Macroglobulin (?-2M) is a homotetrameric serum protein consisting of four identical subunits that form dimers through disulfide bonds. Initially, ?-2M was characterized as a pan-proteinase inhibitor that was able to bait proteinases into cleaving specific peptide sequences on ?-2M. This interaction induces a conformational change in ?-2M, thus enabling it to trap the proteinase and further inhibit its activity. Subsequently, ?-2M has been shown to function as a carrier protein and regulator of cytokines during inflammation. Circulating transforming growth factor ? (TGF?) in serum is primarily bound to ?-2M, which renders TGF? inactive. ?-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 ?-2M are associated with an increased incidence of Alzheimer s disease (AD), which is consistent with the role of ?-2M in mediating the clearance and degradation of A ?, the major component of ?-Amyloid deposits accumulated during AD.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Complement System

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.