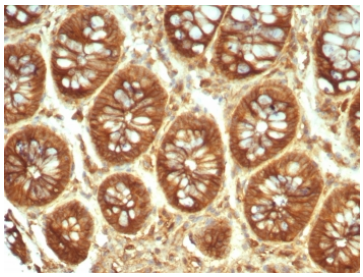
# Alpha-2-Macroglobulin Antibody / A2M [clone A2M/6550] (V4258)

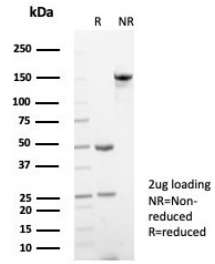
| Catalog No. | Formulation | Size |
|---|---|---|
| V4258-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V4258-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V4258SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2, kappa |
| **Clone Name** | A2M/6550 |
| **Purity** | Protein A/G affinity |
| **UniProt** | P01023 |
| **Localization** | Secreted |
| **Applications** | Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT |
| **Limitations** | This Alpha-2-Macroglobulin antibody is available for research use only. |



IHC staining of FFPE human colon tissue with Alpha-2-Macroglobulin antibody (clone A2M/6550). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.




SDS-PAGE analysis of purified, BSA-free Alpha-2-Macroglobulin antibody (clone A2M/6550) as confirmation of integrity and purity.

## Description

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

## Application Notes

Optimal dilution of the Alpha-2-Macroglobulin antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein sequence (within amino acids 600-800) from the human protein was used as the immunogen for the Alpha-2-Macroglobulin antibody.

## Storage

Aliquot the Alpha-2-Macroglobulin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com