

## Anti-Alpha-2-macroglobulin Antibody (9L785)

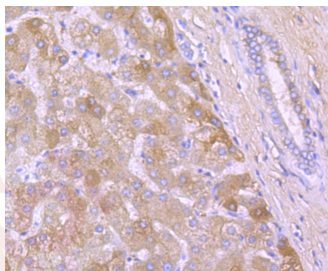
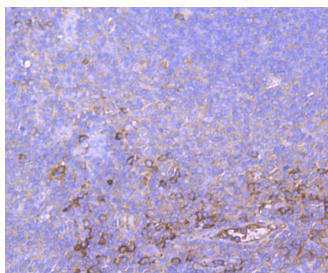
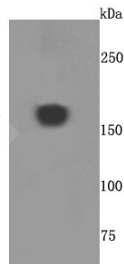
### Product Details

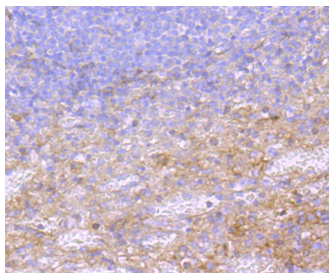
Ig Type:	IgG
Reactivity:	Human
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 163 kDa.
Clone:	9L785
Purification:	ProA affinity purified

### Applications

#### Verified Activity:

1. Western blot analysis of A2M on human placenta cells lysates using anti-A2M antibody at 1/500 dilution.
2. Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-A2M antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-A2M antibody. Counter stained with hematoxylin.
4. Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-A2M antibody. Counter stained with hematoxylin.





Application: IHC,WB

Recommended WB: 1:1000-2000; IHC: 1:50-200

---

### Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

---

### Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: P01023

Synonyms: CPAMD5;FWP007; $\alpha$ -2-macroglobulin;A2MD;S863-7;alpha-2-macroglobulin

---

### Research Background

$\alpha$ -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  $\beta$  (TGF $\beta$ ) in serum is primarily bound to  $\alpha$ -2M, which renders TGF $\beta$  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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481

---