

## A2M polyclonal antibody

Catalog: BS60859

Host: Rabbit

Reactivity: Human, Mouse, Rat

### 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 inhibit its further activity. Subsequently,  $\alpha$ -2M has also 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 inconsistent 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.

### Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.6.

### Molecular Weight:

~ 185 kDa

### Swiss-Prot:

P01023

### Purification & Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific im-

munogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

IHC: 1:50~1:203

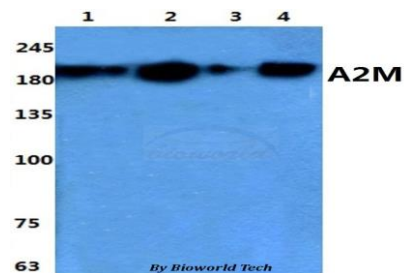
### Storage & Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

A2M polyclonal antibody detects endogenous levels of A2M protein.

### DATA:



Western blot (WB) analysis of A2M polyclonal antibody at 1:500 dilution

Lane 1: HEK293T whole cell lysate

Lane 2: Raw264.7 whole cell lysate

Lane 3: NIH-3T3 whole cell lysate

Lane 4: PC12 whole cell lysate

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogol.com](mailto:info@biogol.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151