

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human $\alpha_2$ -Macroglobulin in direct ELISAs and Western blots. In direct ELISAs, this antibody does not cross-react with rhC5a or rmC5a.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 257316  |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Human plasma-derived $\alpha_2$ -Macroglobulin  |
| <b>Formulation</b>        | Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS. |

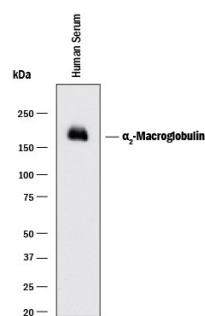
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the Technical Information section on our website.

|                       | <b>Recommended Concentration</b> | <b>Sample</b> |
|-----------------------|----------------------------------|---------------|
| <b>Western Blot</b>   | 2 $\mu$ g/mL                     | See Below     |
| <b>Simple Western</b> | 10 $\mu$ g/mL                    | See Below     |

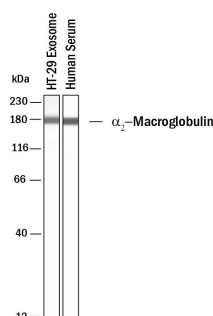
## DATA

### Western Blot



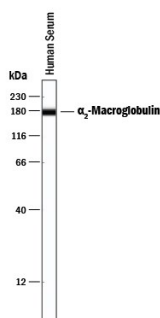
**Detection of Human  $\alpha_2$ -Macroglobulin by Western Blot.** Western blot shows human serum. PVDF membrane was probed with 2  $\mu$ g/mL of Mouse Anti-Human  $\alpha_2$ -Macroglobulin Monoclonal Antibody (Catalog # MAB1938) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for  $\alpha_2$ -Macroglobulin at approximately 180 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Simple Western



**Detection of Human  $\alpha_2$ -Macroglobulin by Simple Western™.** Simple Western lane view shows lysates of Exosome Standards (HT-29) (Catalog # NBP3-11685) and human serum, loaded at 0.5 mg/ml and 1:10 respectively. A specific band was detected for  $\alpha_2$ -Macroglobulin at approximately 178 kDa (as indicated) using 10  $\mu$ g/ml of Mouse Anti-Human  $\alpha_2$ -Macroglobulin Monoclonal Antibody (Catalog # MAB1938) followed by HRP-conjugated Goat Anti-Mouse Secondary Antibody (Catalog # 042-205). This experiment was conducted under reducing conditions and using the 12-230kDa separation system.

### Simple Western



**Detection of Human  $\alpha_2$ -Macroglobulin by Simple Western™.** Simple Western lane view shows human serum, loaded at 0.2 mg/mL. A specific band was detected for  $\alpha_2$ -Macroglobulin at approximately 178 kDa (as indicated) using 10  $\mu$ g/mL of Mouse Anti-Human  $\alpha_2$ -Macroglobulin Monoclonal Antibody (Catalog # MAB1938). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.

**Shipping** Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.

**Stability & Storage** **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Alpha 2-macroglobulin (A2M) is a general and irreversible protease inhibitor implicated in many processes. It is able to inhibit all four classes of proteases by a unique trapping mechanism.