

DESCRIPTION

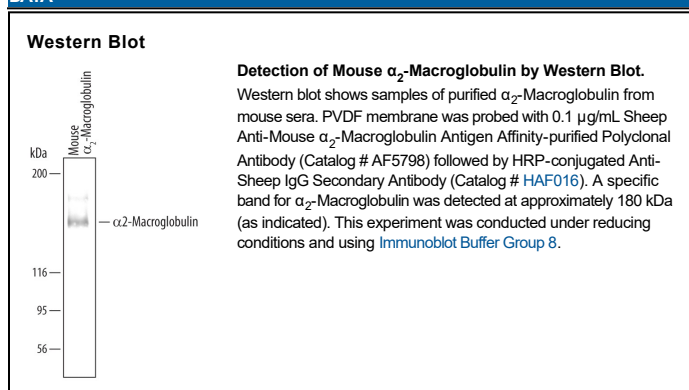
Species Reactivity	Mouse
Specificity	Detects mouse α_2 -Macroglobulin in direct ELISAs and Western blots. In direct ELISA, less than 2% cross-reactivity with human α_2 -Macroglobulin, recombinant rat (rr) α_2 -Macroglobulin, and rr β_2 -Macroglobulin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse serum-derived α_2 -Macroglobulin
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ 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.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 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

α_2 -Macroglobulin (alpha 2 macroglobulin; also A2M and MAM) is a 185 kDa member of the protease inhibitor I39 family of proteins. It is secreted by the liver, circulates at a constant level in the blood, binds multiple growth factors, inhibits a wide variety of proteinases via steric trapping, is cleared by cell surface receptors and likely exists as a tetramer. Mature mouse A2M is 1471 amino acids (aa) in length. It is cleaved between Arg1239 and Asp1240 to generate two subunits, one that is 165 kDa in size and 1215 aa in length and a second that is 35 kDa in size and 256 aa in length. The protease inhibitor region (aa 686-744) is on the large subunit, while the receptor binding segment (aa 1395-1482) is on the smaller subunit. A2M has a counterpart gene termed A2M-P that is associated with pregnancy. The A2M-P molecule shares 56% aa identity with mouse A2M. Notably, mouse A2M-P is closer in aa sequence to human A2M (72%) and rat A2M (91%) than mouse A2M is to human A2M (59%) and rat A2M (56%).