Description **Precipitating polyclonal rabbit antiserum to mouse alpha-2 macroglobulin**

Product code RAM/A2M

Biological origin Rabbit

Physical form Delipidated, heat inactivated, lyophilized, stable whole antiserum

Preservative No preservative added

Immunogen Alpha-2 macroglobulin ids the major protein in the alpha-2 region of mouse serum after separation by electrophoresis. It is a large polymer and a strong antigen. It forms about one-third in the total of the alpha-2 globulins. The protein is isolated by ammonium sulphate precipitation, ion exchange chromatography, gel filtration and preparative starch block electrophoresis. In the purification of alpha-2 macroglobulin the activation of kallikrein is avoided, since it forms an irreversible bond with aplpha-2 macroglobulin, thus contaminating the final immunogen.
Freund's complete adjuvant is used in the first step of the immunization procedure.

Adsorption Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies reacting with other serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.

Identity & Specificity The reactivity of the antiserum is restricted to alpha-2 macroglobulin as tested in immuno-electrophoresis and radial immunodiffusion. A characteristic single precipitin line is obtained with normal serum which shows a reaction of identity with the precipitin line with purified alpha-2 macroglobulin.

Cross-reactivity Inter-species cross reactivity is a normal feature of antibodies to serum proteins, since homologous proteins of different species frequently share antigenic determinants. Cross-reactivity of this antiserum has been tested in double radial immunodiffusion (Ouchterlony) with the following results:

bovine ±	ferret ±	horse ±	rat ++
cat ±	goat -	human -	sheep -
chicken -	guinea pig ±	monkey -	swine ±
dog -	hamster +	pigeon -	turkey -

Protein concentration Total protein and IgG concentrations in the antiserum are comparable to those of pooled normal rabbit serum. No foreign proteins added.

Antibody titre Precipitin titre 1:32 when tested against pooled normal mouse sera of different strains in agar-block immunodiffusion titration.

Intended use In precipitating techniques as immunoelectrophoresis and radial immunodiffusion to identify the presence alpha-2 macroglobulin in mouse serum or other body fluids and to determine its concentration. This antiserum is not intended for use in non-precipitating antibody-binding or other highly sensitive assays, but this does not exclude such use if proper controls are included.

Directions for use In immunoelectrophoresis use 2 µl serum or equivalent against 120 µl antiserum. In double radial immunodiffusion use a rosette arrangement with 10 µl antiserum in 3 mm diameter centre well and 2 µl serum samples (neat and serially diluted) in 2 mm diameter peripheral wells.

Handling The lyophilized antiserum is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. Reconstitute the lyophilized antiserum by adding 1 ml sterile distilled water. Dilutions may be prepared by adding phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance of the antiserum.
Diluted antiserum should be stored at +4°C, not refrozen, and preferably used the same day.

Packing Vial with 1 ml lyophilized antiserum.

Storage / shelf life

Lyophilized at +4°C	at least 10 years
reconstituted at or below -20°C	3-5 years
reconstituted at +4°C	7 days

Caution This antiserum should be handled by qualified persons only and appropriate precautions should be taken in its handling and disposal, and of all associated materials. For *in vitro* research purposes only.

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