NORDIC IMMUNOLOGY **Product Specification**

Description	**Precipitating polyclonal goat antiserum to human alpha-2 ceruloplasmin**
Product code	GAHu/Cpl
Biological origin	Goat
Physical form	Delipidated, heat inactivated, lyophilized, stable whole antiserum
Preservative	No preservative added.
Immunogen	Alpha-2 ceruloplasmin is copper containing alpha-2 glycoprotein with a molecular weight of 160,000. Its mean concentration in plasma of adults is 32 mg/100ml. Elevated levels are observed in pregnant women, in patients with infectious diseases and the nephritic syndrome. More than 90% of the plasma copper is bound to this protein. Ceruloplasmin is isolated from pooled human serum by sequential precipitation and purified by ion exchange chromatography and affinity chromatography. 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 plasma 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 ceruloplasmin. In immunoelectrophoresis and radial immunodiffusion (Ouchterlony), using various antiserum concentrations against fresh normal human plasma a single precipitin line is obtained which shows a reaction of identity with the precipitin line obtained with purified alpha-2 ceruloplasmin. No reaction is obtained with any other plasma protein component or serum.
Cross-reactivity	The antiserum does not cross react with any other component of human plasma. Inter-species cross-reactivity is a normal feature of antibodies to plasma proteins since they frequently share antigenic determinants. Cross-reactivity of this antiserum has not been tested in detail.
Protein concentration	Total protein and IgG concentrations in the antiserum are comparable to those of pooled normal goat serum. No foreign proteins added.
Antibody titre	Precipitin titre 1:64 when tested against in agar-block immunodiffusion titration against an appropriate reference.
Intended use	In precipitating techniques as immunoelectrophoresis and single or double radial immunodiffusion to identify the presence of alpha-2 ceruloplasmin in human plasma or other body fluids or to determine its concentration. The presence of non precipitating antibodies has not been assayed. This does not exclude the use of the antiserum in more sensitive non-precipitating antibody-binding techniques if proper controls are included.
Directions for use	In immunoelectrophoresis use 2 µl or equivalent against 120 µl antiserum. In double radial immuno-diffusion (Ouchterlony) use a rosette arrangement with 10 µl in a 3 mm diameter center 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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