

<b>Description</b>	<b>Precipitating polyclonal sheep antiserum to rat alpha foetoprotein</b>	
<b>Product code</b>	ShARa/AFP	
<b>Biological origin</b>	Sheep	
<b>Physical form</b>	Delipidated, heat inactivated, lyophilized, stable antiserum.	
<b>Preservative</b>	No preservative added, as it may interfere with the activity of the conjugate.	
<b>Immunogen</b>	Purified rat alpha-foetoprotein is isolated from pooled amniotic fluid and hepatoma serum using a proprietary multiple step method. Several foetoproteins have been demonstrated in rat foetal serum and amniotic fluid. One of the best studied is the alpha-foetoprotein. It can be easily identified immunochemically because of its distinct antigenicity. In electrophoresis its relative mobility is between the albumin and the alpha-1 globulin fractions. Its molecular weight is 65,000, the carbohydrate content is relatively low. Freund's complete adjuvant is used in the first step of the immunization procedure.	
<b>Adsorption</b>	Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies reacting with other rat serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.	
<b>Identity &amp; Specificity</b>	The reactivity of the antiserum is restricted to alpha-foetoprotein. In immunoelectrophoresis and double radial immunodiffusion, using various antiserum concentrations against amniotic fluid, rat hepatoma sera and purified alpha-foetoprotein a single characteristic precipitin line is obtained. No reaction is obtained with rat sera of different strains.	
<b>Cross-reactivity</b>	Inter-species cross-reactivity is a normal feature of antibodies to mammalian proteins, since homologous proteins of different species frequently share antigenic determinants. Cross-reactivity of this antiserum has not been tested in detail, however in double radial immunodiffusion (Ouchterlony) a weak precipitation reaction has been observed with mouse amniotic fluid and human cord serum.	
<b>Physicochemical characteristics</b>	Total protein and IgG concentration are comparable to those of pooled normal sheep serum. No foreign proteins added.	
<b>Antibody titre</b>	Precipitin titre not less than 1:64 when tested against pooled rat amniotic fluid in agar-block immunodiffusion titration.	
<b>Intended use</b>	In precipitating techniques as immunoelectrophoresis and single and double radial immunodiffusion (Mancini, Ouchterlony) to identify the presence of alpha-foetoprotein 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 non-precipitating antibody-binding techniques if proper controls are included.	
<b>Directions for use</b>	In immunoelectrophoresis in agarose-plates use 2 µl human plasma or equivalent against 120 µl antiserum. In double radial immunodiffusion use a rosette arrangement with 10 µl antiserum in 3 mm diameter center well and 2 µl plasma samples (neat and serially diluted) in 2 mm diameter peripheral wells.	
<b>Handling</b>	The lyophilized antiserum is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. It is reconstituted by adding 1 ml sterile distilled water, spun down to remove insoluble particles, divided into small aliquots, frozen and stored at or below -20°C. Prior to use, an aliquot is thawed slowly in the dark at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance of the antiserum.	
<b>Packing</b>	Vial with 1 ml lyophilized antiserum.	
<b>Storage / shelf life</b>	Lyophilized at +4°C	at least 10 years
	reconstituted at or below -20°C	3-5 years
	reconstituted at +4°C	7 days
<b>Caution</b>	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 <i>in vitro</i> laboratory research purposes only.	

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