

Description	Precipitating polyclonal goat antiserum to human fibrinogen	
Product code	GAHu/Fbg	
Biological origin	Goat	
Physical form	Delipidated, heat inactivated, lyophilized, stable whole antiserum	
Preservative	No preservative added	
Immunogen	<p>Fibrinogen (clotting factor I) is a heat labile beta glycoprotein (molecular weight 340,000) and consists of three pairs of chains bound by disulphide bonds. It is synthesized in hepatocytes under genetic control. It is the precursor of fibrin, which is the key protein constituting the network of the blood clot. Thrombin converts fibrinogen to fibrin by limited proteolysis, releasing the fibrinopeptides A and B (molecular weight 50,000-65,000) and forming fibrin monomers. Fibrin monomers polymerize to fibrin which is stabilized by cross-linking under the influence of factor XIII. The predominant gamma chain of normal fibrinogen (MW 50,000, with higher variants) has a low affinity for platelet binding. Fibrinogen is isolated from fresh plasma after removing prothrombin. Freund's complete adjuvant is used in the first step of the immunization procedure.</p>	
Adsorption	<p>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.</p>	
Identity & Specificity	<p>The reactivity of the antiserum is restricted to fibrinogen. 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 fibrinogen. No reaction is obtained with any other plasma protein component or serum. However, the antiserum may also react with fibrin monomers, circulating fibrinopeptides and fibrin degradation products.</p>	
Cross-reactivity	<p>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.</p>	
Protein concentration	<p>Total protein and IgG concentrations in the antiserum are comparable to those of pooled normal goat serum. No foreign proteins added.</p>	
Antibody titre	<p>Precipitin titre 1:32 when tested against pooled normal human plasma in agar-block immunodiffusion titration.</p>	
Intended use	<p>In precipitating techniques as immunoelectrophoresis and single or double radial immunodiffusion to identify the presence of fibrinogen in human plasma or other body fluids or to determine its concentration. The normal concentration of fibrinogen in the blood is 2.5 to 3.5 ml /ml, but lower levels are usually adequate for haemostasis. In newborn infants the value is 1.2 to 2.4 mg/ml. Synthesis of foetal fibrinogen may persists for up to 8 weeks, when adult levels are reached. Adult level increase with age and are a risk for heart disease, myocardial infarction and stroke. Fibrinogen is an acute Phase protein and increased levels are found in loosing enteropathies, in severe malnutrition, in tissue necrosis and in malignancy. Extremely high levels are seen in acute pancreatitis and, to a lower extent, in nephritic syndrome. A moderate raise may also been seen during pregnancy and the use of oral contraceptives. Fibrinogen deficiency may be congenital or acquired. If sufficiently severe, it may result in a bleeding disorder. The congenital form is very rare. Acquired hypofibrinogaemia is relatively common, probably indicating increased consumption during intravascular clotting.</p>	
Directions for use	<p>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.</p>	
Packing	<p>Vial with 1 ml lyophilized antiserum.</p>	
Storage / shelf life	<p>Lyophilized at +4°C</p> <p>reconstituted at or below -20°C</p> <p>reconstituted at +4°C</p>	<p>at least 10 years</p> <p>3-5 years</p> <p>7 days</p>
Caution	<p>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> research purposes only.</p>	

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