Description	**Precipitating polyclonal goat antiserum to human coagulation Factor XI**
Product code	GAHu/FXI
Biological origin	Goat
Physical form	Delipidated, heat inactivated, lyophilized, stable whole serum.
Preservative	No preservative added.
Immunogen	Factor XI is a glycoprotein (MW 160,000) composed of two identical polypeptide chains. In electrophoresis it migrates in the gamma region. It is stable on storage, heat \stable at 56ºC for 30 minutes and not adsorbed by gels. Factor XI also occurs in platelets (MW 52,000). Factor XI is converted to an active enzyme by FXIIa but can be activated by other proteases such as trypsin. FXIa activates FIX, but can also activate FXII and plasminogen. Platelet membrane FXI can substitute for plasma FXI in coagulation. Plasma FXI is used for immunization. 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 human serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.
Identity & Specificity	The defined antibody reactivity is restricted to FXI, FXIa and complexes of FXI with HMWK or other proteins. In immunoelectrophoresis, bi-dimensional electrophoresis and radial immunodiffusion (Ouchterlony) against normal plasma, a single precipitin line is obtained which shows a reaction of identity with precipitated purified Factor XI. No reaction is obtained with FXI-depleted plasma.
Cross-reactivity	The antiserum does not cross-react with any other human plasma proteins as tested in gel-diffusion techniques. Inter-species cross-reactivity is a normal feature of antibodies to plasma proteins, since homologous proteins of different species 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 not less than 1:32 as measured against appropriate antigens in precipitin-block titration.
Intended use	This antiserum is primarily intended for the measurement of Factor XI in human plasma using the EID-method (Laurell). FXI is one of the four proteins known to be involved in normal contact activation reactions, activating FXII to FXIIa, which is further capable of triggering the kinin-forming pathway and the fibrinolytic system. FXI is present in normal human plasma both in free form and as a reversible complex with HMWK. FXI competes with prekallikrein (PKK) to form such complexes. Since FXI is a gammaglobulin with cathodic mobility in electrophoresis, up to 140 μg/ml purified HMWK must be added to the plasma to bind all free FXI into negatively charged complexes which will migrate to the anode. The total FXI content can then be measured. The average amount of FXI in an individual plasma was found to be 4.5 μg/ml with a range of 3 to 6 μg/ml. The sensitivity of the EIID method is about 0.2 μg/ml. A congenital deficiency of FXI in plasma can give rise to a serious bleeding disorder. In most cases the plasma level of FXI antigen is also depressed; exceptionally the FXI antigen is normal (a defective molecule) An acquired reduction in both clotting activity and FXI antigen level has been described in disseminated intravascular coagulopathy, in hepatic cirrhosis and in some patients with lupus erythomatosus.
Directions for use	The antiserum concentration required in the gel is normally between 1 and 2%.
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
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.
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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