PROTEIN C AMIDOLYTIC ACTIVITY

Description	Automated chromogenic assay for the quantitative determination of Protein C in human citrated plasma on IL Coagulation Systems.
Indication	Performed as part of a Thrombophilia screen on patients prone to clot formation.
Additional Info	The zymogenic form of protein C is a vitamin K-dependent glycoprotein which circulates in blood plasma. Its structure is that of a two-chain polypeptide consisting of a light chain and a heavy chain connected by a disulfide bond.
Concurrent Tests	If reduced, Protein C Antigen and clot based activity assays
Interpretation	Protein C is a vitamin K dependent protein that is present in plasma as a zymogen. Protein C is activated in vivo by thrombin in the presence of thrombomodulin. Protein C can be activated in vitro by a protein fraction derived from the venom of the copperhead snake Agkistrodon contortrix contortrix. Deficiency of Protein C is associated with recurrent venous thrombosis, especially in young adults. Acquired deficiencies of Protein C are associated with hepatic disorders, oral anticoagulant therapy, and disseminated intravascular coagulation. Protein C results on the ACL and ACL Futura/ACL Advance Systems are not affected by heparin (UF or LMW heparin) up to 2 U/mL, hemoglobin up to 200 mg/dL, triglycerides up to 500 mg/dL and bilirubin up to 5 mg/dL. Protein C results on the ACL TOP are not affected by heparin (UF or LMW heparin) up to 2 U/mL, hemoglobin up to 500 mg/dL, triglycerides up to 890 mg/dL and bilirubin up to 21 mg/dL. Pathological samples that have undergone contact activation may result in falsely elevated Protein C levels. For example, 200-300 U/L of Kallikrein-like activity will result in a 10-20% elevation of Protein C activity. Aprotinin is known to inhibit activated Protein C, thus low Protein C activity may be observed in aprotinin treated patients.
Collection Conditions	Samples must be correctly filled as the ratio of anticoagulant to blood is crucial for accurate test results. Samples will be rejected by the laboratory if they are under or over filled. Samples should arrive in the laboratory within 4 hours of blood draw.
Frequency Of Testing	Abnormal results should be repeated in 6-12 weeks.
Clinical AdviceContact	Haematology Registrar