
Lab Dept: Coagulation

Test Name: PROTAMINE CORRECTION (REPTILASE TIME)

General Information

Lab Order Codes: PCOR

Synonyms: Reptilase Time; Heparin Neutralization; Snake Venom Thrombin Time

CPT Codes: 85635 – Reptilase test

Test Includes: Reptilase time reported in seconds.

Logistics

Test Indications: Atroxin (Reptilase) is purified enzyme from Bothrops atrox venom which converts fibrinogen to fibrin directly, bypassing the conversion of prothrombin to thrombin and the action of thrombin on fibrinogen. Atroxin Time and Thrombin Time are rapid assay tests that measure this polymerization of fibrinogen to fibrin. Any interference with this conversion will be reflected in a prolongation in the clotting time of one or both of these assays. In patients receiving heparin, the Thrombin Time is found to be invariably prolonged, but the Reptilase Time is usually within normal limits. Thus the Reptilase Time can be very helpful in differentiating causes of long Thrombin Times, such as therapy, fibrinogen disorders (hypo-fibrinogenemia and dysfibrinogenemias) or inhibitors of thrombin or of the thrombin/fibrinogen reaction.

Lab Testing Sections: Coagulation - Sendouts

Referred to: Fairview University Medical Center (Test# REPT)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours. Test is performed as needed.

Turnaround Time: 6 hours

Special Instructions: Indicate when specimen is drawn from a line or a heparin lock. Deliver immediately to the laboratory.

Specimen

Specimen Type: Whole blood

Container:	Light Blue top (Buffered Na Citrate 3.2%) tube
Draw Volume:	2.7 mL blood in a 3 mL tube (Minimum: 2.7 mL in a 3 mL tube).
Processed Volume:	Specimens will be processed at reference lab facility if received within 4 hours of collection. Otherwise, specimens need to be processed at referring facility and provide minimum of two 0.5 mL specimens frozen at -70. Follow directions below under Special Processing .
Collection:	<p>Do Not use the first 2 mL's of blood collected.</p> <p>Patients with hematocrit levels of >55% must have a special tube made to adjust for the hematocrit, contact laboratory for special tube.</p> <p>Fill tube completely. Mix thoroughly by gentle inversion.</p> <p>If the patient has a coagulation abnormality, apply direct pressure to the puncture site for 10 minutes; apply a pressure dressing. Instruct the patient to leave the bandage on for 12 hours.</p>
Special Processing:	<p>Lab Staff: Do Not centrifuge. Do Not freeze. Send to reference lab in original Vacutainer® at room temperature if within 4 hours of collection. Forward promptly.</p> <p>If specimen is >4 hours old prior to shipment, process specimen as follows:</p> <p>Spin sample collected in blue top tube(s) for 5 minutes on the Stat Spin centrifuge, remove plasma and transfer to a 4 mL BCS sample cup(s), spin remaining plasma again for 5 minutes in the Stat Spin Centrifuge. Transfer plasma into two labeled 10x75 mL plastic tubes with a minimum of 0.5 mL in each. Freeze at -70 and send specimens on dry ice to Fairview University.</p>
Patient Preparation:	None
Sample Rejection:	Improper tube; clotted samples; underfilled tubes; overfilled tubes; mislabeled or unlabeled specimens

Interpretive

Reference Range:	<22.5 seconds
Critical Values:	N/A
Limitations:	N/A
Methodology:	Reptilase snake venom clotting time
References:	Fairview University Web Page February 2014

Harmening DH (1997) Clinical Hematology and Fundamentals of Hemostasis

Updates:

5/25/2010: Tubing patient specimens is no longer prohibited.

1/13/2014: Reference range update, previously listed as 15.4 – 22.5 seconds

2/24/2014: Fairview specimen processing update.