Vanderbilt Medical Laboratories

TEST STATUS - NEW TEST

Notification Date: 11/13/2024 Effective Date: 11/13/2024

Test Name: von Willebrand factor activity

Test ID: LAB6732

Explanation: Von Willebrand factor (vWF) is currently assessed in the clinical laboratory with measurements of the amount of vWF protein (vWF antigen) and vWF activity (ristocetin cofactor activity) in plasma. On the effective date the ristocetin cofactor activity assay will be discontinued. It will be replaced with a test that measures the ability of vWF to bind to glycoprotein 1B. The new assay is called von Willebrand factor activity. Like the vWF antigen and ristocetin cofactor assays, results for the vWF activity assay will be reported as percent of normal. The normal ranges for both the vWF antigen and vWF activity will be 50-150% of normal. With rare exceptions, results with the vWF activity assay mirror those of the ristocetin cofactor activity assay.

Useful For: Diagnosis of Von Willebrand Disease

Methodology: Turbidimetric, latex-based assay, vWF binding to glycoprotein 1B (GP1B)

Reference Interval: Reportable range 3-320%, normal range 50-150%

Critical Value: N/A

Specimen Requirements:

Specimen Type:	Citrated platelet poor plasma.			
Alternate Specimen:	N/A			
Container/Tube:	Light blue tube (3.2% Sodium Citrate)			
Specimen Preparation:	Collect adequate 2.7 mL or 1.8 mL light blue top tubes for the requested tests. Tubes must be filled to the indicator line and not clotted. Do not place on ice. Whole blood must be received within 4 hours of collection. If sending plasma aliquots, centrifuge and transfer the plasma to a polypropylene tube and repeat the centrifugation step to produce platelet poor plasma. Transfer the plasma to a polypropylene tube and freeze immediately. The aliquot must remain frozen until received in the laboratory. (Minimum 1.0 mL platelet poor plasma.)			
Pediatric Collection:	Pediatric: One 2.7 mL light blue tube (3.2% Sodium Citrate). Neonatal: One 1.8mL light blue tube (3.2% Sodium Citrate). Mix immediately to prevent clotting.			
Storage/Transport Temperature:	Ambient (15-25°C): 4 hours, Frozen (-70°C): 1 month			
VANDERBILT 💱 UNIVERSITY				
MEDICAL CENTER				

Vanderbilt Medical Laboratories

Specimen Stability Information:

Specimen Type	Temperature	Time	
Light blue tube	Ambient: (15-25°C)	4 hours of draw	
Citrated platelet poor plasma.	Frozen (-70°C)	1 month	

Cautions: The von Willibrand factor activity may be significantly elevated above baseline values in several situations including pregnancy, factor replacement therapy, stress, inflammation or after administration of 1-deamino (8-d-arginine)-vasopressin (DDAVP). Clinical correlation is required.

Reasons for Rejection: Incorrect tube type, clotted sample, incorrect fill volume, received on ice, grossly hemolyzed, grossly icteric, grossly lipemic. Whole blood > 4 hours after collection. Thawed plasma aliquots.

Recommendations: Patient preparation; indwelling lines should be flushed with saline only and 5 mL of blood should be discarded prior to collecting coagulation samples. When using a winged collection device (butterfly), draw a discard tube prior to the patient sample. Collecting a waste tube prevents underfilling the tube and ensures the proper blood to anticoagulant ratio.

CPT Code(s):

Days(s) Performed: M-F, Turn Around Time 2 - 7 days

Report Available: N/A

Note: The following referral test code will become obsolete.

Test Name	Test ID	Referral Lab Code	Referral Lab
Ristocetin Cofactor	LAB335	NA	NA
Activity			

Questions: Please get in touch with Vanderbilt Medical Laboratories Customer Service at 615-875-5227 (5-LABS) or 800-551-5227 or visit our website: <u>Home | Vanderbilt Medical Laboratories (vumc.org)</u>

