
Lab Dept: Coagulation

Test Name: VON WILLEBRAND MULTIMERS

General Information

Lab Order Codes: VONM

Synonyms: Polymers, von Willebrand Factor; von Willebrand CIEP; vWD Multimers

CPT Codes: 85247 – Factor VIII, von Willebrand factor, multimeric analysis

Test Includes: Interpretive report of findings regarding von Willbrand related testing.

Logistics

Test Indications: Used to classify von Willebrand's variants of type 2vWD and as an aid determining appropriate treatment.

For further interpretation of results or questions regarding Multimer analysis, please contact Pathology at (612) 813-6711. Children's laboratory will hold specimen from von Willebrand Screen testing for one month.

Lab Testing Sections: Coagulation - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: 8844/VWFM2)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 7 - 10 days; performed Monday and Tuesday

Special Instructions: Indicate on request from when specimen is drawn from a line or a heparin lock. See [Collection](#) and [Patient Preparation](#). Specimen should be collected prior to coagulation factor replacement therapy.

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

Processed Volume:	1 mL (Minimum: 0.5 mL) plasma
Collection:	Routine venipuncture or line draw. Fill the tube completely. Mix thoroughly by gentle inversion. Deliver immediately to the laboratory.
Special Processing:	<p>Lab Staff: Centrifuge specimen, remove plasma, spin plasma again and place 0.5 mL of platelet-poor plasma into one plastic vial. (Glass vials are not acceptable) Label appropriately and freeze specimen in von Willebrand Multimer cup in -70 degree Centigrade freezer. Forward promptly.</p> <p>Must provide results for Ristocetin Cofactor and von Willebrand Factor Antigen or if not performed, provide additional 0.5 mL of plasma in a separate plastic vial.</p>
Patient Preparation:	Patient must not be receiving Coumadin® or heparin.
Sample Rejection:	Improper tube; clotted samples; underfilled tubes; overfilled tubes; specimens over two hours old; mislabeled or unlabeled specimens

Interpretive

Reference Range:	<p>Interpretive report</p> <p>Note: The plasma vWF multimer analysis is a qualitative visual assessment of the size spectrum and the banding pattern of vWF multimers. This test is used to identify variants of type 2 vWD that have fewer of the largest multimers, have unusually large multimers, or have qualitatively abnormal bands that indicate abnormal vWF structure.</p>
Critical Values:	N/A
Limitations:	<p>vWF multimer analysis is not useful if:</p> <p>The following tests are normal: Factor VIII Activity Assay, Ristocetin Cofactor, von Willebrand Factor Antigen</p> <p>The vWF ristocetin cofactor:vWF antigen ratio is > or = 0.7.</p>
Methodology:	Agarose gel electrophoresis/infrared dye-labeled antibody detection.
References:	<p>Mayo Medical Laboratories July 2013</p> <p>Harmening DH (1997) Clinical Hematology and Fundamentals of Hemostasis</p>
Updates:	5/24/2010: Tubing patient specimens is no longer prohibited.