

**REQUEST FOR TESTING  
HEMOSTASIS REFERENCE LABORATORY**



Puget Sound Blood Center

research | medicine | blood & tissue services

921 Terry Avenue | Seattle, WA 98104-1256

See NEXT PAGE for sample requirements. Current test descriptions and CPT codes may be viewed at <http://www.psbcc.org> – open the “Laboratory Services” tab.

**HEMOSTASIS REFERENCE LABORATORY (206) 292-6594 Laboratory Staffed for Questions: 8:00 a.m. - 4:30 p.m. Monday - Friday  
FAX: (206) 373-6616 Samples accepted daily, 24 Hrs./Day, 7 Days/Week. Sample Info Line: (206) 292-1876**

**PROFILES** (See next page for specific tests)

- Abnormal PT or APTT Reflexive Evaluation
  - Bleeding Diathesis with a Normal APTT/PT
  - DIC Panel
  - Extrinsic Factor Evaluation
  - Fibrinogen Evaluation
  - Fibrinolysis Evaluation
  - Factor VIII Inhibitor Bethesda Screen/Titer
  - Factor Inhibitor Bethesda Screen/Titer (other than Factor VIII)
- Specify Factor: \_\_\_\_\_

- Intrinsic Factor Evaluation
- Lupus Anticoagulant Screen (Reflex to Confirm)
- Lupus Anticoagulant Confirm
- Platelet Aggregation\*
- Platelet Function Assay (PFAs)\*
- Thrombosis Genetic Risk
- Thrombosis Risk
- Thrombosis/Hypercoagulability Risk
- von Willebrand

**INDIVIDUAL TESTS**

- 3260-01  ADAMTS 13 Activity (Performed by Platelet Lab)
- 3260-02  ADAMTS 13 Inhibitor (Performed by Platelet Lab)
- 3230-04  Antiplasmin
- 3230-01  Antithrombin III Activity
- 3230-08  APC Resistance Activity Ratio for Factor V Leiden
- 3200-05  APTT (Abnormals reflex to 1:1 mix)
- 3200-10  APTT 1:1 Mix
- 3200-10  APTT 1:1 Mix (incubated)
- 3200-05  APTT (Post-Heparin Removal)\*
- 3210-27  D-dimer (quantitative)
- 3220-07  dRVVT Screen
- 3220-08  dRVVT Confirm Ratio
- 3250-04  DNA/Factor II (Prothrombin) Mutation
- 3250-03  DNA/Factor V Leiden (APC Resistance) Mutation
- 3250-07  DNA MTHFR C677T Mutation
- 3250-05  DNA/Factor VIII Inversion
- 3250-02  DNA Hemophilia A Mutation Screen
- 3250-10  DNA Hemophilia B Mutation Screen
- 3250-11  Genotyping for known Hemophilia/VWD Mutation
- 3250-08  DNA von Willebrand Disease Type 2A/2B
- 3250-08  DNA von Willebrand Disease Type 2N
- 3210-10  Factor II Activity
- 3210-11  Factor V Activity
- 3210-12  Factor VII Activity
- 3210-13  Factor VIII Activity
- 3210-18  Factor VIII Activity Chromogenic
- 3210-14  Factor IX Activity

- 3210-15  Factor X Activity
- 3210-16  Factor XI Activity
- 3210-17  Factor XII Activity
- 3200-07  Factor XIII Screen
- 3210-06  FDP in Plasma (semi-quantitative)
- 3200-08  Fibrinogen Activity
- 3210-19  Heparin by anti-Xa
- 3230-06  Plasminogen Activity
- 3245-01  Platelet Function Assay (PFA) Epinephrine/Collagen\*
- 3245-02  Platelet Function Assay (PFA) ADP/Collagen\*
- 3230-02  Protein C Activity
- 3230-03  Protein S Activity
- 3200-04  Prothrombin Time (Abnormals reflex to 1:1 mix)
- 3200-04  Prothrombin Time 1:1 Mix
- 3200-11  Reptilase Time
- 3220-06  STACLOT-LA (Hexagonal PL)
- 3200-02  Thrombin Time
- 3200-02  Thrombin Time 1:1 Mix
- 3220-03  Tissue Thromboplastin Inhibition Time (TTIT)
- 3210-03  von Willebrand Activity by Ristocetin Cofactor \*\*
- 3210-20  von Willebrand Antigen \*\*
- 3210-26  von Willebrand Collagen Binding\*\*
- 3210-24  von Willebrand Multimers\*\*
- Other: \_\_\_\_\_

NOTE: \* See Specimen Collection Information  
\*\* von Willebrand profile must be ordered with this test

NOTE: Information in BOLD must be completed.

SAMPLE DRAWN: DATE \_\_\_\_/\_\_\_\_/\_\_\_\_ TIME \_\_\_\_\_  am  pm

Sample Drawn By: \_\_\_\_\_

Specimen/Accession No.: \_\_\_\_\_

Diagnosis/Purpose of Testing: \_\_\_\_\_

ICD9 Code: \_\_\_\_\_

History / Comments / Special Instructions: \_\_\_\_\_

MEDICATION:  Heparin  Coumadin  Aspirin

**PHYSICIAN OR AUTHORIZED PERSON ORDERING TEST:**

Phone: \_\_\_\_\_ Pager: \_\_\_\_\_

<b>Name: LAST</b> _____			<b>FIRST</b> _____			<b>M.I.</b> _____		
<b>Hospital Identification Number</b> _____								
<b>Hospital / Institution</b> _____								
<b>Social Security Number</b> _____			<b>Sex (M/F)</b> _____			<b>Date of Birth (mm/dd/yy)</b> _____		

**Blood Center use only**  
Place log label here

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

SEND REPORT TO: Fax number: \_\_\_\_\_

Name \_\_\_\_\_

Street \_\_\_\_\_

City, State, Zip \_\_\_\_\_

SEND BILL TO (if different than above):

Name \_\_\_\_\_

Street \_\_\_\_\_

City, State, Zip \_\_\_\_\_

If the sample is from an individual other than the affected patient:

Patient Name: \_\_\_\_\_

Relationship to the Patient: \_\_\_\_\_

# TESTS IN THE HEMOSTASIS PROFILES

Order only those tests that are medically necessary. Tests may be ordered individually.

## Abnormal PT or APTT Reflexive Evaluation Profile

APTT (3200-05)  
PT (3200-04)  
Thrombin Time (3200-02)  
Fibrinogen Activity (3200-08)  
Additional assays will be performed as indicated

## Bleeding Diathesis with a Normal APTT/PT Profile

APTT (3200-05)  
PT (3200-04)  
Factor VIII Activity (3210-13)  
Factor IX Activity (3210-14)  
Factor XI Activity (3210-16)  
von Willebrand Antigen (3210-20)  
Ristocetin Cofactor (vWF) Activity (3210-03)  
Factor XIII Screen (3200-07)  
D-Dimer quantitative (3210-27)  
Fibrinogen Degradation Prod. (3210-06)  
Antiplasmin (3230-04)  
Fibrinogen Activity (3200-08)

## DIC Panel

APTT (3200-05)  
PT (3200-04)  
Fibrinogen Activity (3200-08)  
D-dimer quantitative (3210-27)  
Fibrinogen Degradation Prod. (FDP) (3210-06)

## Extrinsic Factor Evaluation Profile

PT (3200-04)  
PT 1:1 Mix (3200-04)  
APTT (3200-05)  
APTT 1:1 Mix (3200-10)  
Factor II Activity (3210-10)  
Factor V Activity (3210-11)  
Factor VII Activity (3210-12)  
Factor X Activity (3210-15)

## Factor VIII Inhibitor Bethesda Screen /Titer Profile

APTT (3200-05)  
APTT 1:1 Mix x2 (includes incubated mix) (3200-10)  
Factor VIII Activity (3210-13)

Factor VIII Inhibitor Screen (3220-04)  
(Reflex to Bethesda titer if positive)  
Factor VIII Inhibitor Titer (3220-02)

## Factor Inhibitor Bethesda Screen/Titer other than Factor VIII Profile

PT (3200-04)  
PT 1:1 Mix (3200-04)  
APTT (3200-05)  
APTT 1:1 Mix (3200-10)  
Factor Inhibitor Screen (3220-04)  
(Reflex to Bethesda titer if positive)  
Other Factor Inhibitor Titer (3220-02)

## Fibrinogen Evaluation Profile

Fibrinogen Activity (3200-08)  
Reptilase Time (3200-11)  
Thrombin Time (3200-02)  
Thrombin 1:1 Mix (3200-02)

## Fibrinolysis Evaluation Profile

Abnormal PT or APTT Reflexive Evaluation Profile  
Antiplasmin (3230-04)  
D-dimer quantitative (3210-27)  
Fibrinogen Degradation Prod. (FDP) (3210-06)  
Plasminogen Activity (3230-06)

## Intrinsic Factor Evaluation Profile

PT (3200-04)  
PT 1:1 Mix (3200-04)  
APTT (3200-05)  
APTT 1:1 Mix (3200-10)  
Factor VIII Activity (3210-13)  
Factor IX Activity (3210-14)  
Factor XI Activity (3210-16)  
Factor XII Activity (3210-17)

## Lupus Anticoagulant Screen Profile

PT (3200-04)  
APTT (3200-05)  
APTT 1:1 Mix (3200-10)  
Tissue Thromboplastin Inhibition (3220-03)  
dRVVT Screen (3220-07)  
(Reflex to Profile)

## Lupus Anticoagulant Confirm Profile

Lupus Anticoagulant Screen Profile  
Thrombin Time (3200-02)  
STACLOT-LA (Hexagonal PL) (3220-06)  
dRVVT Confirm (3220-08)

## Platelet Aggregation Profile

Platelet Function Assay (PFA) Profile  
Platelet Aggregation Study (3240-01)  
(each agent)

## Platelet Function Assay (PFA) Profile

Platelet Count (3200-06)  
PFA Epinephrine/Collagen (3245-01)  
PFA ADP/Collagen (3245-02)

## Thrombosis Genetic Risk Profile

Factor V Leiden (3250-03)  
Factor II Prothrombin Mutation (3250-04)

## Thrombosis Risk Profile

PT (3200-04)  
PT 1:1 Mix (3200-04)  
APTT (3200-05)  
Antithrombin III Activity (3230-01)  
Protein C Activity (3230-02)  
Protein S Activity (3230-03)

## Thrombosis/Hypercoagulability Risk Profile

Factor VIII Activity (3210-13)  
Lupus Anticoagulant Screen Profile  
Thrombosis Genetic Risk Profile  
Thrombosis Risk Profile

## von Willebrand Profile

APTT (3200-05)  
Factor VIII Activity (3210-13)  
Ristocetin Cofactor (vWF) Activity (3210-03)  
Von Willebrand Factor (vWF) Antigen (3210-20)

**If the APTT is prolonged and the factor VIII is normal, this panel reflexes to an APTT Reflexive Evaluation Profile**

## HEMOSTASIS REFERENCE LABORATORY (206) 292-6594

The Puget Sound Blood Center's Hemostasis Reference Laboratory has over 25 years of experience in providing quality hemostatic evaluations including testing, interpretation of results and patient evaluations. The laboratory features considerable technical experience in a wide variety of instrumentation, reagents and available specialty testing with extensive Quality Assurance and CLIA approved procedures. Puget Sound Blood Center's blood component therapy, hemophilia care and apheresis programs are supported by the Hemostasis Reference Laboratory and testing is also available for various research protocols. Any profile may be customized to meet client needs and expedite the ordering process.

## SPECIMEN COLLECTION INFORMATION (206) 292-1876

### Hemostasis Reference Laboratory Samples:

All coagulation testing is done using plasma from 3.2% sodium citrate collection tubes. Send two 5 ml or three 3 ml sodium citrate whole blood tubes. The sample should be kept at Room Temperature (15-25°C) and received by the Blood Center, Terry and Madison location, within three hours after collection between the hours of 8am to 3pm Monday through Friday (excluding holidays).

**If this is not possible:** Centrifuge tubes at 1500g for 15-20 minutes and remove the plasma. For best results the plasma should be centrifuged a second time at 1500g for 15-20 minutes. Then place approximately 1 ml of plasma into plastic tubes, freeze and send on dry ice. The minimum requirements are two (2) plasma tubes with at least 0.5 ml of plasma in each tube. Do not send more than 6 aliquots. When appropriate, sample integrity testing will be performed. This usually includes an APTT and possibly a PT.

*Notes: (1) Insufficient sample tubes will negatively affect turn-around time. (2) Therapeutic anticoagulation interferes with most kinetic (but not DNA) tests. Care should be taken to obtain samples on the opposite arm from the IV site or from an adequately flushed port site. If a sample is found to contain Heparin, it may be necessary to remove it and charge for an APTT Post-Heparin Removal.*

### PFA and Platelet Aggregation:

Platelet Aggregations cannot be collected outside our facility and require the patient to visit the Puget Sound Blood Center where the samples will be drawn. PFAs only, may be sent if prior arrangements have been made. Call the Hemostasis Reference Laboratory at (206) 292-6594 for details on how to send a PFA or to schedule an appointment with the technologist.

### DNA Laboratory Samples:

DNA mutation testing requires at least **10 ml EDTA whole blood (purple top)**. The sample must arrive at the Blood Center within **48 hours after collection** ship preferably with a "cool pack." Samples may be sent via overnight express, addressed to Puget Sound Blood Center, ATTN: Hemostasis Reference Laboratory, 921 Terry Avenue, Seattle WA 98104-1256. Send samples so they arrive Monday - Thursday only (no holidays).