

COAGULATION
FACTOR
ASSAYS

Orderable - F2/F5/F7/F8/F9/F10/F11/F12

Turnaround Time: 7 days

STAT: 4 hours

Alternate Name(s):

Factor Assays (II, V, VII, VIII, IX, X, XI, XII)

Factor VIII

F8

Factor IX

F9



Laboratory:

Hemostasis and
Thrombosis Laboratory



Requisition:

GENERAL LABORATORY
REQUISITION



Method of Analysis:

Automated clot detection
system

Specimen:

Adult	Pediatric
2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes	0-2 years: 1.8 mL Sodium Citrate Coagulation tube: Contact HAT lab ext. 52526 for number of tubes required prior to sampling

Collection Information:



Test Schedule:

Routine/Stat as required

Collect blood aseptically in Vacutainer tubes.

All test requests, regardless of whether the patient is an adult or pediatric, **must** be authorized by a Hematologist (listed in the Comments section below).

Reference Ranges:

Factor X	
Age	Range
0 Min - 5 Days:	0.13-0.68 U/mL
5 Days - 1 Month	0.19-0.79 U/mL
1 Month - 3 Months:	0.31-0.87 U/mL
3 Months - 6 Months:	0.35-1.07 U/mL
6 Months - Adult:	0.50-2.00 U/mL

COAGULATION
 FACTOR
 ASSAYS

Factor XI	
Age	Range
0 Min - 5 Days:	0.10-0.66 U/mL
5 Days - 1 Month	0.23-0.87 U/mL
1 Month - 3 Months:	0.27-0.79 U/mL
3 Months - 6 Months:	0.41-0.97 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor XII	
Age	Range
0 Min - 5 Days:	0.13-0.93 U/mL
5 Days - 1 Month	0.11-0.83 U/mL
1 Month - 3 Months:	0.34-1.02 U/mL
3 Months - 6 Months:	0.45-1.05 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor II	
Age	Range
0 Min - 5 Days:	0.26-0.70 U/mL
5 Days - 1 Month	0.33-0.93 U/mL
1 Month - 3 Months:	0.34-1.02 U/mL
3 Months - 6 Months:	0.45-1.05 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor V	
Age	Range
0 Min - 5 Days:	0.34-1.08 U/mL
5 Days - 1 Month	0.45-1.45 U/mL
1 Month - 3 Months:	0.62-1.34 U/mL
3 Months - 6 Months:	0.48-1.32 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor VII	
Age	Range
0 Min - 5 Days:	0.13-0.68 U/mL
5 Days - 1 Month	0.19-0.79 U/mL
1 Month - 3 Months:	0.31-0.87 U/mL
3 Months - 6 Months:	0.35-1.07 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor VIII	
Age	Range
0 Min - 5 Days:	0.50-1.78 U/mL
5 Days - 1 Month	0.50-1.54 U/mL
1 Month - 3 Months:	0.50-1.57 U/mL

COAGULATION
FACTOR
ASSAYS

3 Months - 6 Months:	0.50-1.25 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Factor IX	
Age	Range
0 Min - 5 Days:	0.15-0.91 U/mL
5 Days - 1 Month	0.15-0.91 U/mL
1 Month - 3 Months:	0.21-0.81 U/mL
3 Months - 6 Months:	0.21-1.13 U/mL
6 Months - Adult:	0.50-2.00 U/mL

Critical Value:

For newly diagnosed hemophilia patient. Factor VIII or IX level less than 0.10 U/mL

Special Processing:

Blue (Sodium Citrate) top tubes should be centrifuged within 4 hours of collection.

The blood specimen must be double centrifuged to prepare platelet free plasma.

Centrifuge the primary tube or tubes for 10 minutes at 3000 rpm, aliquot and re-spin for an additional 10 minutes at 3000 rpm at room temperature (18 to 20 degrees Celsius). Ensure the temperature does not exceed 20 degrees Celsius.

The double-centrifuged plasma is aliquoted into plastic tubes labelled with the appropriate Cerner generated aliquot label and frozen immediately at -20 degrees Celsius or below.

SRA Processing:

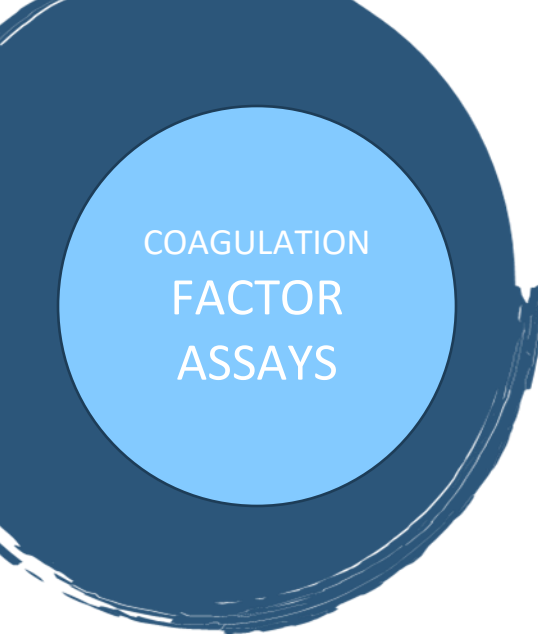
UH/SJH All shifts:

Log in samples and bring INR/PTT sample to the Coag Bench. Process the rest of the samples as per the procedure above. Place samples/aliquot labels with transfer list in the SPEC COAG Bin in the -20C freezer. All samples to be sent to VH SRA the following morning. Upon arrival VH SRA will place the samples in the -20 bin. The HAT staff will pick up the samples.

VH 0700-1500 shift:

Log in samples and bring INR/PTT sample to the Coag. Bench. Place the rest of the samples/aliquot labels in the pneumatic tube and send to the 10th floor HAT Lab at VH. (No transfer list is required). Call HAT Lab at ext. 52526 to let them know a sample is coming.

VH after 1500:



COAGULATION
FACTOR
ASSAYS

Log in samples and bring INR/PTT sample to the Coag Bench. Process the rest of the samples as per the procedure above. Place samples/aliquot labels in the SPEC COAG Bin in the -20C freezer. All samples will be picked up the following morning by the HAT staff.

VH Referred-In samples:

When a sample is received from an outside healthcare institution, please order SPCOAGRI, put a small accession label on the requisition, then place the frozen samples and labels in the SPEC COAG Bin in the -20 freezer. Please send the requisition with the accession number on it, to the 10th floor. These samples will be held until the next morning and picked up by the HAT Lab staff. If the HAT Lab staff require a sample earlier than the next morning, they will come down and get it. Call the HAT Lab at ext. 52526 to let them know the requisition is arriving.

Comments:

Please direct any questions or concerns to:
Hematology Scientist
519-685-8500 x 55402
Pager 17716

All test requests, regardless of whether the patient is an adult or pediatric, **must be authorized by a Hematologist** by contacting the adult or pediatric Hematologist on call through switchboard.

It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB.

Critical Information Required:

Bleeding history if available

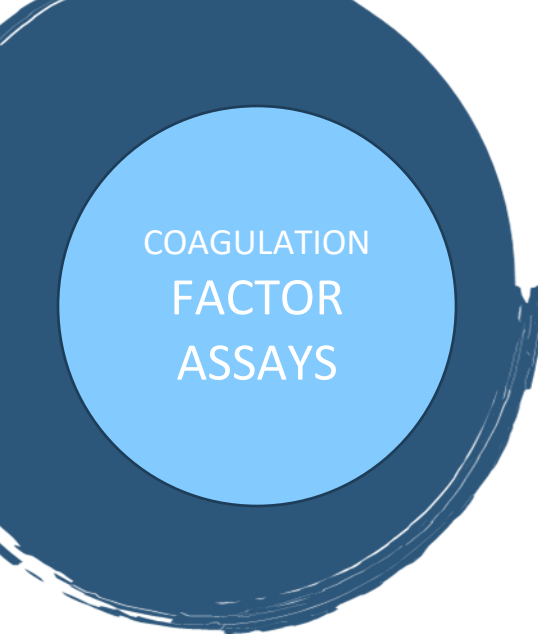
Storage and Shipment:

Blue (Sodium Citrate) top specimens are kept at 18-24 degrees Celsius and should be centrifuged and tested within 4 hours from the time of specimen collection.

If specimens cannot be processed immediately, or the specimen cannot be shipped to arrive at LHSC within 4 hours, then the specimen should be double centrifuged and plasma should be removed from the cells and frozen.

Plasma aliquots may be kept for up to two weeks at -20 degrees Celsius, or up to six months at -70 degrees Celsius.

Transport of plasma aliquots must be done so that they arrive frozen at Victoria



COAGULATION
FACTOR
ASSAYS

Hospital. Samples that are not frozen upon arrival at Victoria Hospital will not be processed and the ordering physician contacted.

Once received by the Sample Receiving Department at Victoria Hospital, samples are to be stored at -70 degrees Celsius within 15 minutes.