
Reporting Title: Thrombophilia Prof**Performing Location:** Mayo Clinic Laboratories - Rochester Main Campus**Ordering Guidance:**

Multiple coagulation profile tests are available. See [Coagulation Profile Comparison](#) for testing that is performed with each profile.

Shipping Instructions:

Send all specimens in the same shipping container.

Specimen Requirements:

Both blood and plasma are required.

Patient Preparation:

1. Patient **should not** be receiving Coumadin (warfarin), heparin, direct thrombin inhibitors (argatroban, dabigatran), or direct factor Xa inhibitors (apixaban, rivaroxaban, and edoxaban).
2. Specimen must be collected prior to initiation of anticoagulants and thrombolytic therapy.
3. If patient has been recently transfused, it is best to perform this study pretransfusion, if possible.

Specimen Type: Whole blood**Container/Tube:****Preferred:** Lavender top (EDTA)**Acceptable:** Yellow top (ACD), light-blue top (3.2% sodium citrate)**Specimen Volume:** 3 mL**Collection Instructions:**

1. Invert several times to mix blood.
2. Send whole blood specimen in original tube. **Do not aliquot.**
3. Label specimen as whole blood.

Specimen Type: Platelet-poor plasma**Collection Container/Tube:** Light-blue top (3.2% sodium citrate)**Submission Container/Tube:** Plastic vial (polypropylene preferred)**Specimen Volume:** 5 mL in 5 plastic vials; each containing 1 mL**Collection Instructions:**

1. Specimen must be collected prior to factor replacement therapy.
2. For complete instructions, see [Coagulation Guidelines for Specimen Handling and Processing](#).
3. Centrifuge, transfer all plasma into a plastic vial, and centrifuge plasma again.
4. Aliquot plasma (1-2 mL per aliquot) into 5 separate plastic vials leaving 0.25 mL in the bottom of centrifuged vial.
5. Freeze plasma immediately (no longer than 4 hours after collection) at -20 degrees C or, ideally, -40 degrees C or below.

Additional Information: Double-centrifuged specimen is critical for accurate results as platelet contamination may cause spurious results.

Forms:

Specimen Type	Temperature	Time	Special Container
Whole blood	Ambient (preferred)	14 days	
	Refrigerated	14 days	
	Frozen	14 days	
Plasma Na Cit	Frozen	14 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
ATTF	Antithrombin Activity, P	Numeric	%	27811-9
CFX	Protein C Activity, P	Numeric	%	27818-4
PSF	Protein S Ag, Free, P	Numeric	%	27821-8
APCR	APCRV Ratio	Numeric		13590-5
INT55	Interpretation	Alphanumeric		48591-2
21803	Prothrombin G20210A Mutation, B	Alphanumeric		24475-6
21804	PTNT Interpretation	Alphanumeric		69049-5
21806	PTNT Reviewed By	Alphanumeric		18771-6
APTSC	Activated Partial Thrombopl Time, P	Numeric	sec	14979-9
CLFIB	Fibrinogen, Clauss, P	Numeric	mg/dL	48664-7
TTSC	Thrombin Time (Bovine), P	Numeric	sec	46717-5
DIMER	D-Dimer, P	Numeric	ng/mL FEU	In Process
INRSC	INR	Numeric		6301-6
PTSEC	Prothrombin Time (PT), P	Numeric	sec	5902-2
603184	Thrombophilia Interpretation	Alphanumeric		69049-5
603325	Reviewed by	Alphanumeric		18771-6
RVR1	DRVVT Screen Ratio	Numeric	ratio	15359-3

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
AATHI	Thrombophilia Interpretation	1	85390	Yes	No
PTSC	Prothrombin Time (PT), P	1	85610	Yes	Yes, (order PTTP)

Test Definition: AATHR

Thrombophilia Profile, Plasma and Whole
Blood

APT SC	Activated Partial Thrombopl Time, P	1	8573 0	Yes	Yes, (order APTTP)
DR V1	Dilute Russells Viper Venom Time, P	(if appropriate)85613-DRVVT confirmation (if appropriate)	8561 3	Yes	Yes, (order DRV11)
TTS C	Thrombin Time (Bovine), P	1	8567 0	Yes	Yes
CLFI B	Fibrinogen, Clauss, P	1	8538 4	Yes	Yes, (order FIBTP)
DI ME R	D-Dimer, P	1	8537 9	Yes	Yes, (order DDITT)
ATT F	Antithrombin Activity, P	1	8530 0	Yes	Yes
CFX	Protein C Activity, P	1	8530 3	Yes	Yes
PSF	Protein S Ag, Free, P	1	8530 6	Yes	Yes, (order PSTF)
APC RV	Activated Protein Resistance V, P	1	8530 7	Yes	Yes
PTN T	Prothrombin G20210A Mutation, B	1	8124 0	Yes	Yes

CPT Code Information:

- 81240-F2 PTNT
- 85300-ATTF
- 85303-CFX
- 85306-PSF
- 85307-APCRV
- 85379-DIMER
- 85384-CLFIB
- 85390-26-AATHI
- 85610-PTSC
- 85613-DRV1
- 85670-TTSC
- 85730-APTSC
- 81241-F5 (coagulation factor V) (eg, hereditary hypercoagulability) gene analysis, Leiden variant (if appropriate)
- 85210-Factor II (if appropriate)
- 85220-Factor V (if appropriate)
- 85230-Factor VII (if appropriate)
- 85240-Factor VIII (if appropriate)
- 85250-Factor IX (if appropriate)
- 85260-Factor X (if appropriate)
- 85270-Factor XI (if appropriate)

- 85280-Factor XII (if appropriate)
85301-Antithrombin antigen (if appropriate)
85302-Protein C antigen (if appropriate)
85305-Protein S antigen, total (if appropriate)
85306-Protein S activity (if appropriate)
85366-Soluble fibrin monomer (if appropriate)
85385-PT-Fibrinogen (if appropriate)
85597-Platelet neutralization for lupus inhibitor (if appropriate)
85598-Hex LA (if appropriate)
85611-PT mix 1:1 (if appropriate)
85613-DRVVT mix (if appropriate)
85613-DRVVT confirmation (if appropriate)
85635-Reptilase (if appropriate)
85732 - APTT Mix 1:1 (if appropriate)

Reflex Tests:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
ATTI	Antithrombin Antigen, P	1	85301	No	Yes
FACTV	Coag Factor V Assay, P	1	85220	No	Yes
F_7	Coag Factor VII Assay, P	1	85230	No	Yes
F_9	Coag Factor IX Assay, P	1	85250	No	Yes
F_10	Coag Factor X Assay, P	1	85260	No	Yes
F_11	Coag Factor XI Assay, P	1	85270	No	Yes
F_12	Coag Factor XII Assay, P	1	85280	No	Yes
F8A	Coag Factor VIII Activity Assay, P	1	85240	No	Yes
RTSC	Reptilase Time, P	1	85635	No	Yes
F_2	Coag Factor II Assay, P	1	85210	No	Yes
PCAG	Protein C Ag, P	1	85302	No	Yes
F5DNA	Factor V Leiden (R506Q) Mutation, B	1	81241	No	Yes
PNP	Platelet Neutralization Procedure	1	85597	No	No
PTMSC	PT Mix 1:1	1	85611	No	No
APMSC	APTT Mix 1:1	1	85732	No	No
PST	Protein S Ag, Total, P	1	85305	No	No
DRV2	DRVVT Mix	1	85613	No	No
DRV3	DRVVT Confirmation	1	85613	No	No
SOLFM	Soluble Fibrin Monomer	1	85366	No	No
PTFIB	PT-Fibrinogen, P	1	85385	No	No
HEXLA	HEX LA, P	1	85598	No	No
SFX	Protein S Activity, P	1	85306	No	Yes

Result Codes for Reflex Tests:

Test Definition: AATHR

Thrombophilia Profile, Plasma and Whole
Blood

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
ATTI	ATTI	Antithrombin Antigen, P	Numeric	%	27812-7
F8A	F8A	Coag Factor VIII Activity Assay, P	Numeric	%	3209-4
FACTV	FACTV	Coag Factor V Assay, P	Numeric	%	3193-0
F_10	F_10	Coag Factor X Assay, P	Numeric	%	3218-5
F_11	F_11	Coag Factor XI Assay, P	Numeric	%	3226-8
F_2	F_2	Coag Factor II Assay, P	Numeric	%	3289-6
F_7	F_7	Coag Factor VII Assay, P	Numeric	%	3198-9
F_9	F_9	Coag Factor IX Assay, P	Numeric	%	3187-2
PCAG	9127	Protein C Ag, P	Numeric	%	27820-0
F_12	F_12	Coag Factor XII Assay, P	Numeric	%	3232-6
PST	PST	Protein S Ag, Total, P	Numeric	%	27823-4
F5DNA	21838	Factor V Leiden (R506Q) Mutation, B	Alphanumeric		21668-9
F5DNA	21839	F5DNA Interpretation	Alphanumeric		69049-5
F5DNA	21841	F5DNA Reviewed By	Alphanumeric		18771-6
PNP	PNPPL	Platelet Neutralization Procedure	Numeric	sec	75506-6
PNP	PNPSA	PNP Buffer Control	Numeric	sec	103619-3
SOLFM	SOLFM	Soluble Fibrin Monomer	Numeric	mcg/mL	93748-2
PTFIB	PTFIB	PT-Fibrinogen, P	Numeric	mg/dL	3255-7
DRV3	RVCR3	DRVVT Confirm Ratio	Numeric	ratio	50410-0
DRV2	RVMR2	DRVVT Mix Ratio	Numeric	ratio	75512-4
RTSC	RTSC	Reptilase Time, P	Numeric	sec	6683-7
APMSC	APMSC	APTT Mix 1:1	Numeric	sec	5946-9
PTMSC	PTMSC	PT Mix 1:1	Numeric	sec	5959-2
HEXLA	HXDLT	HEX LA Delta	Numeric	sec	96267-0
SFX	SFX	Protein S Activity, P	Numeric	%	27822-6

Reference Values:

An interpretive report will be provided.