

PROTEIN C ANTIGEN, PROTEIN S TOTAL ANTIGEN AND PROTEIN S FREE ANTIGEN REFLEX Testing Update (Included in Coagulation Thrombophilia Consult)

Effective Date: June 06, 2017

As of June 06, 2017, Protein C Antigen, Protein S Total Antigen and Protein S Free Antigen reflex testing will no longer be performed at Beaumont Laboratory Royal Oak. These samples will be sent to Warde Medical Laboratory. New reference ranges are listed in table 1 below.

Beaumont Laboratory will continue its policy of reflexing to the above tests only when protein C activity and/or protein S activity are abnormal and the patient is not on warfarin (Coumadin®). Protein C and protein S activity will continue to be performed in house, however, in order to ensure that sufficient sample is obtained for transfer to Warde Medical Laboratory when indicated, clients who currently submit frozen plasma specimens for Protein C Activity, Protein S Activity, and the Coagulation Thrombophilia Consult must follow the specimen processing requirements in table 2 below.

Table 1

Test name		Current Beaumont reference range	New Warde reference range
Protein C Antigen	0 – 10 days	70 – 150 %	0 – 50 %
	> 10 days	70 – 150 %	72 -160 %
Protein S Antigen, Total	All ages	60 – 150 %	50 – 140 %
Protein S Antigen, Free	Male	60 – 150 %	57 – 171 %
	Female	60 – 150 %	50 – 147 %

Table 2

Test Name	New Specimen Collection Requirements	Specimen Processing Requirements*
Protein C Activity	2 Light Blue-tops (3.2% Sodium Citrate tube)	Minimum of 2 frozen plasma aliquots in plastic tubes
Protein S Activity	2 Light Blue-tops (3.2% Sodium Citrate tube)	Minimum of 3 frozen plasma aliquots in plastic tubes
Coagulation Thrombophilia Consult	5 Light Blue-tops (3.2% Sodium Citrate tube) 1 4.0 mL Lavender-top (K ₂ EDTA tube) 1 Gold-top (SST tube)	• 5 Light Blue-top (3.2% Sodium Citrate Tubes) spun, split and frozen in 5 individual plastic tubes • 1 4.0 mL Lavender-top (K ₂ EDTA tube)- no change • 1 Gold-top (SST Tube)- no change

Continued on other side →

Beaumont Laboratory
Customer Service
1-800-551-0488

28050 Grand River Ave.
Farmington Hills, MI 48336

468 Cadieux Road
Grosse Pointe, MI 48230

3601 West 13 Mile Road
Royal Oak, MI 48073

44201 Dequindre Road
Troy, MI 48085

Beaumont

Beaumont Laboratory

*Specimen processing requirements:

For optimal results, maintain whole blood Sodium Citrate specimens at room temperature (20-26°C or 68-78.8°F) prior to transport. Transport whole blood to the Laboratory within 4 hours of collection. If transport within 4 hours is not possible, the following aliquot procedure must be followed for accurate results:

1. Centrifuge the capped tube at 1500 x g for 15 minutes.
2. Transfer plasma with a plastic pipette into a plastic polypropylene centrifuge tube, cap and centrifuge an additional 15 minutes at 1500 x g.
3. Immediately remove only the top two-thirds of the plasma and transfer it into plastic aliquot tubes. (See table above for the number of aliquots).
4. Freeze (-20°C/-4°F or below) the plasma specimens immediately.
5. Transport frozen on DRY ICE. Specimen *must* remain frozen during transport.

If you have questions, please contact Client Services (1-800-551-0488, option 5).

Laboratory Test Directory: <http://beaumontlaboratory.com/test-lab-directory>.

Date submitted: May 15, 2017

Submitted by: Marc Smith, MD, Medical Director, Coagulation, Royal Oak

Beaumont Laboratory

Customer Service

1-800-551-0488

28050 Grand River Ave.
Farmington Hills, MI 48336

468 Cadieux Road
Grosse Pointe, MI 48230

3601 West 13 Mile Road
Royal Oak, MI 48073

44201 Dequindre Road
Troy, MI 48085

www.beaumontlaboratory.com