

**Reporting Title:** Protein S Ag, Total, P  
**Performing Location:** Rochester

**Specimen Requirements:**  
Only orderable as part of a profile. For more information see PSTF / Protein S Antigen, Plasma.

- Specimen Type:** Platelet-poor plasma
- Patient Preparation:** **Patient must not be receiving heparin or Coumadin.** If the patient is being treated with Coumadin, this should be noted. Coumadin will lower protein S.
- Collection Container/Tube:** Light-blue top (3.2% sodium citrate)
- Submission Container/Tube:** Plastic vials
- Specimen Volume:** 1 mL in 2 plastic vials each containing 0.5 mL
- Collection Instructions:**
- For complete instructions, see [Coagulation Guidelines for Specimen Handling and Processing](#).
  - Centrifuge, transfer all plasma into a plastic vial, and centrifuge plasma again.
  - Aliquot plasma into separate plastic vial leaving 0.25 mL in the bottom of centrifuged vial.
  - Freeze plasma immediately (no longer than 4 hours after collection) at -20 degrees C or ideally, at -40 degrees C or below.
  - Send specimens in the same shipping container.
- Additional Information:**
- Double-centrifuged specimen is critical for accurate results as platelet contamination may cause spurious results.
  - Each coagulation assay requested should have its own vial.

Specimen Type	Temperature	Time	Special Container
Plasma Na Cit	Frozen	14 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
PST	Protein S Ag, Total, P	Numeric	%	27823-4

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

**Supplemental Report:**  
No

**CPT Code Information:**  
85305

**Reference Values:**  
Only orderable as part of a profile. For more information see PSTF / Protein S Antigen, Plasma.

Males: 80-160%  
Females:

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<50 years: 70-160%

> or =50 years: 80-160%

Normal, full-term newborn infants or healthy premature infants may have decreased levels of total protein S (15%-50%), but because of low levels of C4bBP, free protein S may be normal or near the normal adult level (> or =50%). Total protein S reaches adult levels by 90-180 days postnatal.\*

\*See Pediatric Hemostasis References section in [Coagulation Guidelines for Specimen Handling and Processing](#)