

## Overview

### Useful For

Assessing nutritional status

### Method Name

Photometric, Bromcresol Green

### NY State Available

Yes

## Specimen

### Specimen Type

Serum

### Necessary Information

Patient's age and sex are required.

### Specimen Required

#### Container/Tube:

**Preferred:** Serum gel

**Acceptable:** Red top

**Specimen Volume:** 0.5 mL

#### Collection Instructions:

1. Serum gel tubes should be centrifuged within 2 hours of collection.
2. Red-top tubes should be centrifuged and aliquoted within 2 hours of collection.

### Specimen Minimum Volume

0.25 mL

### Reject Due To

Gross hemolysis	Reject
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### Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	150 days	
	Frozen	120 days	

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## Clinical & Interpretive

### Clinical Information

Albumin is a carbohydrate-free protein, which constitutes 55% to 65% of total plasma protein. It maintains oncotic plasma pressure, is involved in the transport and storage of a wide variety of ligands, and is a source of endogenous amino acids. Albumin binds and solubilizes various compounds, including bilirubin, calcium, long-chain fatty acids, toxic heavy metal ions, and numerous pharmaceuticals.

Hypoalbuminemia is caused by several factors: impaired synthesis due either to liver disease (primary) or due to diminished protein intake (secondary), increased catabolism as a result of tissue damage and inflammation, malabsorption of amino acids, and increased renal excretion (eg, nephrotic syndrome).

### Reference Values

> or =12 months: 3.5-5.0 g/dL

Reference values have not been established for patients who are <12 months of age.

For SI unit Reference Values, see <https://www.mayocliniclabs.com/order-tests/si-unit-conversion.html>

### Interpretation

Hyperalbuminemia is of little diagnostic significance except in the case of dehydration. When plasma or serum albumin values fall below 2.0 g/dL, edema is usually present.

### Cautions

Albumin values determined by the bromcresol green method may not be identical to the albumin values determined by electrophoresis.

### Clinical Reference

1. Tietz Textbook of Clinical Chemistry. Edited by CA Burtis, ER Ashwood. Philadelphia, WB Saunders Company, 1999
2. Peters T, Jr: Serum albumin. *In* The Plasma Proteins. Vol 1. Second edition. Edited by F Putnam, New York, Academic Press, 1975

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## Performance

### Method Description

The dye, bromcresol green (BCG), is added to serum in an acid buffer. The color intensity of the blue-green albumin-BCG complex is directly proportional to the albumin concentration and is determined photometrically. (Package insert: Roche Albumin reagent; Roche Diagnostic Corp., Indianapolis, IN, July 1999)

### PDF Report

No

### Day(s) Performed

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Monday through Sunday

**Report Available**

Same day/1 to 2 days

**Specimen Retention Time**

1 week

**Performing Laboratory Location**

Rochester

**Fees & Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact [Customer Service](#).

**Test Classification**

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

82040

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
ALB	Albumin, S	1751-7

Result ID	Test Result Name	Result LOINC® Value
ALB	Albumin, S	1751-7