

# C5, SERUM

## Orderable – C5

Turnaround Time: 10 days

### Alternate Name(s):

C5 complement component level  
C5 Level  
C5L

### Specimen:

| Adult   | Pediatric  |
|---|--|
| 5 mL Gold top<br>Vacutainer tube  | 0-2 years: 4 x 0.5 mL Red top<br>Microtainer tubes<br>2-10 years: 3.5 mL Gold top<br>Vacutainer tube |
| Light Green (Li-Heparin) and Lavender (EDTA) top tubes are<br><b>NOT</b> acceptable |  |



**Laboratory:**  
Clinical Immunology Lab



**Requisition:**  
GENERAL LABORATORY  
REQUISITION



**Method of Analysis:**  
Nephelometry



**Test Schedule:**  
Referred out Monday-  
Thursday



**Referred to:**  
[In-Common Laboratories](#)  
if indicated based on the  
CH50 level

### Collection Information:

1 mL of serum is requested for C5 testing, but the minimum volume of serum required is 500 µL.

Testing for CH50 (total complement, TCOMP) will be performed first to determine if the C5 test is indicated. The minimum volume of serum required for CH50 testing is 500 µL.

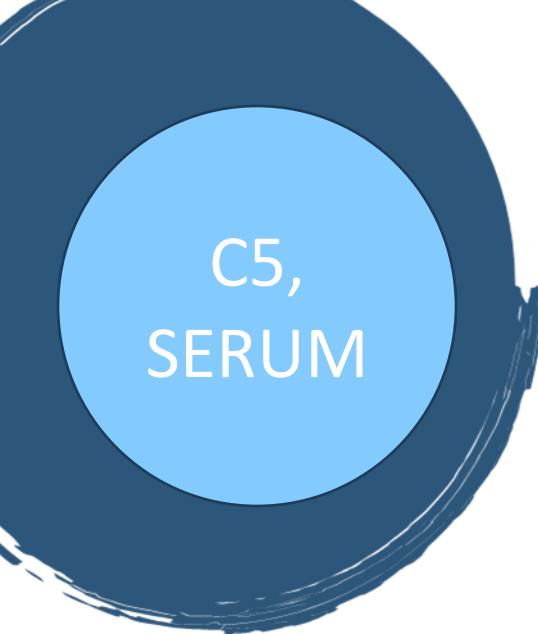
### Reference Ranges:

10.6-26.3 mg/dL

### Interpretive Comments:

Total complement (TCOMP, CH50) is a screen for classical pathway function.

The component assay is a quantitative evaluation of the concentration of the component but does not evaluate the functional activity of the component. Absent C5 levels in the presence of normal C3 and C4 values are consistent with a C5 deficiency. Absent C5 levels in the presence of low C3 and C4 values suggest



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complement consumption. A small number of cases have been described in which the complement protein is present but is non-functional. These rare cases require a functional assay to detect the deficiency.

## Special Processing:

Centrifuge gold or red top tube(s) at room temperature following clotting. Prepare serum aliquot of at least 500  $\mu$ L for the CH50 test. Prepare serum aliquot of at least 500  $\mu$ L (1 mL preferred) for the C5 test. If there is sufficient serum volume, please prepare an extra an extra aliquot of at least 500  $\mu$ L for the C5 test. Freeze aliquot tubes as rapidly as possible. Send all frozen aliquots (either 2 or 3) to Immunology Lab.

## Comments:

**This test is available exclusively to SJHC/LHSC physicians.**

Total complement (CH50) is assayed first to determine if C5 testing is necessary. If the CH50 level is within the normal range, C5 testing will not be performed.

## Storage and Shipment:

Store and ship serum frozen.