

C9

## Orderable – C9

Turnaround Time: 40 days

### Alternate Name(s):

C9 complement component level  
C9 Level  
C9L

### Specimen:

Adult	Pediatric
4 mL Lavender or 6 mL Pink top (EDTA) Vacutainer tube	0-2 years: 0.5 mL Lavender or Pink top (EDTA) Microtainer 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube

The C9 test is ordered as a casset that also includes the CH50 (total complement, TCOMP) test. CH50 will be measured first to determine if the C9 test is indicated. Therefore, both EDTA plasma (for C9 testing) collected as in the chart above and serum (for CH50 testing) as collected in the chart below are required.

Adult	Pediatric
5 mL Gold top Vacutainer tube	0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube

### Collection Information:

Minimum volume of EDTA plasma for C9 test is 250 µL. Minimum volume of serum for CH50 test is 500 µL.

### Reference Ranges:

33-95 mg/L

### Interpretive Comments:

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



**Laboratory:**  
Clinical Immunology Lab



**Requisition:**  
[National Jewish Hospital  
Complement Testing  
Requisition](#)



**Method of Analysis:**  
Radial Immunodiffusion  
(RID)



**Test Schedule:**  
Referred out monthly.  
Total complement CH50 is performed as a screen to determine the component assay is required.



**Referred To:**  
National Jewish Medical  
and Research Center  
1400 Jackson St.,  
Denver, Colorado  
80206



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The component assay is a quantitative evaluation of the concentration of the component but does not evaluate the functional activity of the component.

### Special Processing:

Centrifuge lavender or pink (EDTA) tube at room temperature as soon as possible after collection. If there is enough EDTA plasma, prepare 2 aliquots with at least 250  $\mu\text{L}$  each. If there is not enough EDTA plasma for 2 aliquots, prepare 1 aliquot with at least 250  $\mu\text{L}$ . Freeze aliquot tube(s) as rapidly as possible.

Centrifuge red or gold top tube(s) at room temperature following clotting. Aliquot serum and then freeze aliquot tube.

Send all frozen aliquots (1-2 of EDTA plasma for C9 and 1 of serum for CH50) and the National Jewish Hospital requisition form to Immunology Lab.

### Comments:

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

Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component (C9) will not be tested.

### Storage and Shipment:

LHSC (SRA to Immunology Laboratory) – ship frozen on ice packs. Avoid freeze/thaw cycles.

### Specimen Stability:

Frozen at  $-70^{\circ}\text{C}$ : 1 year