



Pathology and Laboratory Medicine





Turnaround Time: 13 days

Specimen:

| Adult | Pediatric |
|-----------------|-------------------------------|
| 5 mL Gold top | 0-2 years: 3 x 0.5 mL Red top |
| Vacutainer tube | Microtainer tubes |
| | 2-10 years: 3.5 mL Gold top |
| | Vacutainer tube |
| 1:1:0 /::1 1.0 | |

Light Green (Li-Heparin) top tubes are **NOT** acceptable

Lavender (EDTA) top tubes are acceptable, but serum is recommended rather than EDTA plasma since CH50 must be tested prior to C1q and the CH50 test requires serum.



Laboratory:Clinical Immunology Lab



Requisition:

GENERAL LABORATORY REQUISITION



Method of Analysis: Radial immunodiffusion

Collection Information:

1 mL of serum is requested for C1q testing, but the minimum volume of serum required is $100 \mu L$.

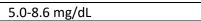
Testing for CH50 (total complement, TCOMP) will be performed first to determine if the C1q test is indicated. The minimum volume of serum required for CH50 testing is $500~\mu L$.



Test Schedule:

Referred out Monday-Thursday

Reference Ranges:





Referred Out Location: In-Common Laboratories

Interpretive Comments:

This test quantifies the C1q protein level. It does not evaluate the function of C1q. A low level of C1q indicates either increased consumption (catabolism) or decreased synthesis.

This test does NOT include C1 esterase inhibitor or C1 esterase inhibitor functional assay. Order these tests separately. See Lab Test Information Guide entry for C1IN.

Low C1IN level, impaired C1IN function, and decreased C1q protein concentration are all associated with acquired angioedema.







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The component C1q test does NOT evaluate circulating immune complexes (IC).

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

Special Processing:

Centrifuge gold or red top tube(s) at room temperature following clotting. Prepare serum aliquot of at least 500 μ L for the CH50 test. Prepare serum aliquot of at least 100 μ L (1 mL preferred) for the C1q test. If there is sufficient serum volume, please prepare an extra an extra aliquot of at least 100 μ L for the C1q 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 C1q testing is necessary. If the CH50 level is within the normal range, C1q testing will not be performed.

Storage and Shipment:

Store and ship serum frozen.