C2

Orderable - C2
Turnaround Time: 40 days

Alternate Name(s):
C2 complement component level
C2 Level
C2L

Specimen:

<table>
<thead>
<tr>
<th></th>
<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 mL Lavender or 6 mL Pink top (EDTA) Vacutainer tube</td>
<td>0-2 years: 0.5 mL Lavender or Pink top (EDTA) Microtainer 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube</td>
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</table>

The C2 test is ordered as a careset that also includes the CH50 (total complement, TCOMP) test. CH50 will be measured first to determine if the C2 test is indicated. Therefore, both EDTA plasma (for C2 testing) collected as in the chart above and serum (for CH50 testing) as collected in the chart below are required.

<table>
<thead>
<tr>
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<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 mL Gold top Vacutainer tube</td>
<td>0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</td>
</tr>
</tbody>
</table>

Collection Information:
Minimum volume of EDTA plasma for C2 test is 250 µL. Minimum volume of serum for CH50 test is 500 µL.

Reference Ranges:
22.2 – 39.8 mg/L; no pediatric range

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.

**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 µL each. If there is not enough EDTA plasma for 2 aliquots, prepare 1 aliquot with at least 250 µL. 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 C2 and 1 of serum for CH50) and the National Jewish Hospital requisition form to the Immunology Lab.

**Comments:**

This test is available exclusively to SJHC/LHSC physicians.

Total complement is assayed first to determine if the component 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 (C2) will not be tested.

**Storage and Shipment:**

Ship frozen on ice packs. Avoid freeze/thaw cycles.

**Specimen Stability:**

Frozen at -70°C: 1 year