

Complement, Total (CH50)

Order Name: **CH50**
 Test Number: 5569251
 Revision Date: 04/14/2023

| TEST NAME | METHODOLOGY | LOINC CODE |
|--------------------------|------------------------|------------|
| Complement, Total (CH50) | Quantitative IVD Assay | 4532-8 |

SPECIMEN REQUIREMENTS

| | | | | |
|--------------|--|---------------|---|-----------------------|
| Specimen | Specimen Volume (min) | Specimen Type | Specimen Container | Transport Environment |
| Preferred | 1 mL (0.3 mL) | Serum | Clot Activator (Red Top, No-Gel) | Frozen |
| Instructions | Allow 1 hour to clot at room temperature, Separate the serum from cells ASAP or no longer than 2 hours after collection. Separate the serum from the cells and transfer 1mL(0.3mL) of serum into a standard transport tube and freeze within 2 hours of collection. Do Not Share this specimen with another test. It is critical to freeze the complement specimen immediately after the transfer of specimen to a transport tube. Reasons for Rejection: Use of serum separator tube, Clotting at 2-8°C, Exposure to repeated freeze/thaw cycles, Samples containing high levels of lipid, hemoglobin or bilirubin cause interference and should be avoided. Stability: Room Temperature 2 hours, Refrigerated n/a, Frozen 2 Weeks | | | |

GENERAL INFORMATION

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|---------------------|--|
| Testing Schedule | Tuesday, Friday |
| Expected TAT | 5-7 days, batched |
| Clinical Use | Low levels of total complement may occur during infection, exacerbation of SLE, exacerbation of hereditary angioedema and glomerulonephritis. Undetectable levels suggest possibility of a complement deficiency. |
| Notes | This assay is an FDA approved quantitative IVD assay that will improve testing reliability, workflow and turn around time (TAT). The methodology utilizes liposomes, encapsulating glucose-6-phosphate dehydrogenase (G6PDH) to mimic an invading microorganism. The patient's serum sample provides the complement for the lysis of the liposome which releases G6PDH and reacts with glucose-6-phosphate and NAD. The change in absorbance is measured and is proportional to the complement activity in the sample. The results are compared to a calibration curve which gives a value for the patient's sample. Complement activity has been correlated with the active stage of systemic lupus erythematosus, rheumatoid arthritis, some forms of nephritis and inherited deficiencies of the classical complement system. |
| CPT Code(s) | 86162 |
| Service Provided By |  labcorp Oklahoma, Inc. |