

Complement C3 (C3) Test Kit (Immunoturbidimetry)

【NAME】

Complement C3 (C3) Test Kit (Immunoturbidimetry)

【INTEND USE】

This reagent is intended for the in vitro quantitative determination of Complement C3 (C3) in human serum. Complement is mainly synthesized in the liver, where the complement C3 and C4 are the most frequently detected. C3 is the most abundant and the most important in complement system, which is the central link in the two major activation system. Immune complex nephritis, systemic lupus erythematosus, recurrent infections, rashes, hepatitis, cirrhosis of the liver, joint pain can lead to low C3 content. The C3 content of Serum patients with lupus nephritis is reduced, will return to normal after remission. It is not only helpful in the diagnosis, but also observe the efficacy and monitor prognosis.

【METHODOLOGY】

C3 and C3antibody latex particle reagent is reaction, And generate immune complex. Detection of the turbidity of change at 340nm, the degree of change is proportional to the C3 levels in the samples.

【STABILITY AND STORAGE】

Unopened, avoid light preservation in 2 ~ 8 °C, valid for 12 months;
Opened, avoid contamination preservation in 2 ~ 8 °C, valid for 1 month.
Reagent is not allowed frozen.

【SPECIMEN COLLECTION AND HANDLING】

Using serum as sample.Heparin or EDTA plasma can also be used as a sample.

Serum stability:2~8°Cpreservation stability in 7days;
When the blood fat of sample≤5g/L, bilirubin≤600umol/,hemolysis ≤ 5g/L, was not observed clearly disturbance.

【APPLICABLE INSTRUMENT】

Fully automatic biochemical analyzer.

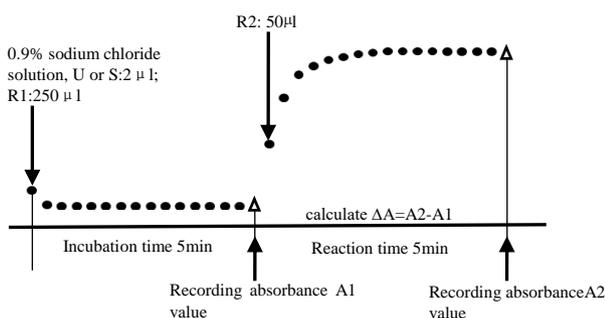
【SYSTEM PARAMETERS】

The following system parameters are recommended. Individual instrument applications are available upon request from the Technical Support Group

Temperature	37° C
Cuvette light path	1.0cm
Primary Wavelength	340 nm
Assay Type	Two Point End
Direction	Increase
Sample : Reagent 1: Reagent 2 Ratio	2:250:50
eg : Sample Vol.	2 μL
Reagent1 Vol.	250μL
Reagent2 Vol.	50 μL
Linearity	0~520mg/dL
Testing	Deducting the reagent blank

【OPERATION STEPS】

R1: Reagent 1 R2: Reagent 2 S: Calibrator U: Sample



【CALCULATION】

$$C3 \text{ sample concentration} = \frac{\text{Sample } \Delta A}{\text{Calibrator } \Delta A} \times \text{Standard concentration}$$

According to the calibration requirements, with different levels of calibration solution, together with 9 g/L sodium chloride solution as the blank. After measurement, the instrument automatically synthesizes calibration curve for the calibration response quantity through the appropriate mathematical model (such as Logit/ Spline). Using C3 calibration values to calibrate instrument, within the scope of the reportable results, the instrument directly reports reliable test results.

【REFERENCE RANGE】

Adults: 82 ~ 180 mg/dL (0.82 ~ 1.80 g/L)
Unit conversion: mg/dL x 0.01= g/L

By clinical trials, choose no less than 100 newborn or adults blood specimens, tested by automatic biochemical analyzer, and then processing the testing value with statistical method, calculating out the reference range.

Recommendation: The laboratory set up its own reference range!

【THE LIMITATION OF TEST RESULTS】

Complement C3 (C3) testing is just one of the standard that clinician diagnose the patient. Clinical physicians should according to patients' bodies, history and other diagnostic program, to get comprehensive judgment.

【THE INTERPRETATION OF TEST RESULTS】

Human error, the processing of specimen, analysis instrument deviation, etc. all can affect the measurement result; When one sample deviates from the expected value too far, need to be tested again.

【PERFORMANCE INDEX】

- 1.Reagent blank absorbance ≤0.2,(340nm,1cm optical path).
- 2.Precision: repeatability CV≤10%;batch variations R≤10%.
- 3.Accuracy: relative deviation ≤10%.
- 4.Linearity range: 0~520mg/dL, r≥0.990.
5. Stability: All package reagent, non corrosive gas and avoid light, preservation in 2~8 °C, stable 12 months.

【ATTENTION】

- 1.Should be according to the specified method to store reagent after opening reagent.
- 2..Different batches reagents cannot mix, when replacing reagents batch number, please calibration again.
- 3.According to medical waste disposal method, deal with contact test specimen tube apparatus.