

Calcium (Ca) Test Kit (Arsenazo III)

【NAME】

Calcium (Ca) Test Kit (Arsenazo III)

【INTEND USE】

This reagent is intended for the in vitro quantitative determination of Calcium (Ca) in human serum, plasma.

【METHODOLOGY】

Calcium and Arsenazo III form blue complex under neutral conditions, Color intensity is proportional to the concentration of calcium. 8-Hydroxyquinoline-5-sulfonic acid can be masking the interference of magnesium.

【STABILITY AND STORAGE】

Unopened, avoid light preservation in 2 ~ 8 °C, valid for 12 months;

Opened, avoid light preservation in 2 ~ 8 °C, valid for 1 month.

Reagent is not allowed frozen.

【SPECIMEN COLLECTION AND HANDLING】

Serum, or Heparin plasma or urine ,Do not use contaminated samples.

Urine diluted with distilled water, and the detection value multiplied by the dilution ratio .

Serum or plasma stability: 2~8°C preservation stability in 24h;

Urine stability: 20~ 25 °C preservation stability in 2 days; 4~ 8 °C preservation stability in 4 days; -20 °C preservation can be stable for 3 months..

【APPLICABLE INSTRUMENT】

Fully automatic biochemistry 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	660 nm
Secondary Wavelength	700nm
Assay Type	One Point End
Direction	Increase
Sample : Reagent Ratio	3:200
eg : Sample Vol	6μL
Reagent Vol	400 μL
Linearity	1.25~3.75mmol/L
Testing	Deducting the reagent blank

【ATTENTION】

1.Reagent contains sodium azide (toxic) preservatives, avoid contact with skin and mucous membrane.If necessary preventive measures should be taken use of reagents, reagent contact with skin and mucous membrane, please rinse with water, please go to a doctor if necessary.

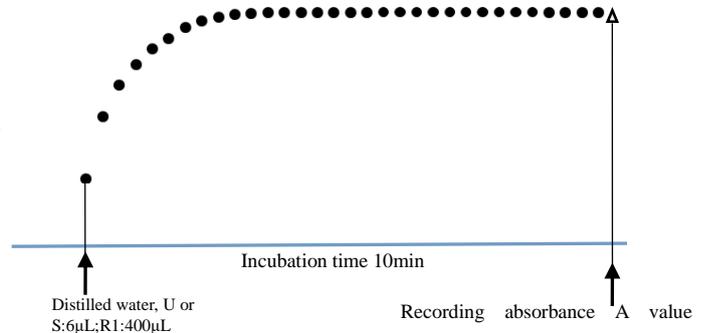
2.The maximum linearity is 3.75mmol/L.If testing results is upper limit,dilute with 0.9% sodium chloride solution before test, results multiplied by the dilution ratio.

3.Liquid waste disposal: Suggest follow local regulations

4.Different batches reagents cannot mix, when replacing reagents batch number, please calibration again.

【OPERATION STEPS】

R:Reagent S:Calibrator U:Sample



【CALCULATION】

Use The Calibrator

$$\text{Sample Ca concentration} = \frac{\text{Sample } \Delta A}{\text{Calibrator } \Delta A} \times \text{Calibrator concentration}$$

【REFERENCE RANGE】

Serum/Plasma:2.05~2.54mmol/L

Urine:female<6.24mmol/24h male<7.49mmol/24h

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.

【THE LIMITATION OF TEST RESULTS】

Calcium (Ca) 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 ≤ 1.5, (660nm,1cm optical path).
- 2.Precision: repeatability CV ≤ 5%; batch variations R ≤ 5%.
- 3.Accuracy: relative deviation ≤ 10%.
- 4.Linearity range: 1.25~3.75mmol/L, r ≥ 0.990.