

Inorganic Phosphorous (IP) Test Kit (Colorimetric)

【NAME】

Inorganic Phosphorous (IP) Test Kit (Colorimetric)

【INTEND USE】

This reagent is intended for the invitro quantitative determination of Inorganic Phosphorous (IP) in human serum,plasma on both manual and automated systems. The reagent is intended for the in vitro quantitative determination of inorganic phosphorus (IP) in human serum, plasma and urine. Inorganic phosphorus increased in chronic nephritis, hypothyroidism, multiple myeloma, fracture healing period, etc. Inorganic phosphorus decrease in hyperthyroidism, rickets, etc.

【METHODOLOGY】

P*ammonium molybdate+sulfuric acid(H₂SO₄)→Phosphomolybdic acid complex

【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,Heparin plasma or Urine .
Urine diluted with distilled water, and the detection value multiplied by the dilution ratio .
Serum or plasma stability:2-8°C preservation stability in 7 days;
-20°C preservation can be stable for 3 months.

Urine stability: 2~ 8°Ckeep stable 2 days.

【APPLICABLE INSTRUMENT】

Fully automatic biochemistry analyzer..

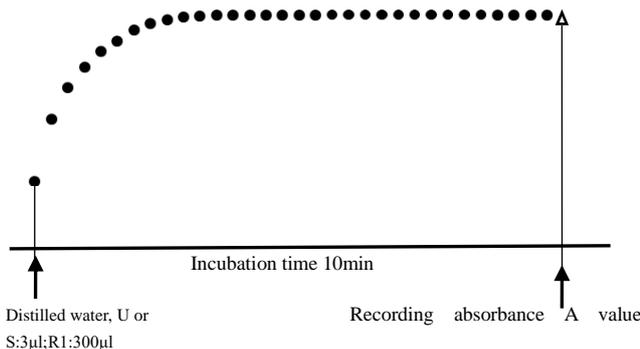
【SYSTEM PARAMETERS】

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	340 nm
Secondary Wavelength	405nm
Assay Type	One Point End
Direction	Increase
Sample : Reagent Ratio	1:100
eg : Sample Vol	3 μL
Reagent Vol	300 μL
Linearity	0~4.0mmol/L
Testing	Deducting the reagent blank

【OPERATION STEPS】

R:Reagent S:Calibrator U:Sample



【CALCULATION】

Use The Calibrator

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

【REFERENCE RANGE】

Serum/Plasma:0.87~1.45mmol/L
Urine:12.9~42.0mmol/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】

Inorganic Phosphorous (IP) testing is just one of the standard that cliniciat 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≤0.5,(340nm,1cm optical path).
- 2.Precision: repeatability CV≤5%;batch variations R≤5%.
- 3.Accuracy:relative deviation ≤10%.
- 4.Linearity range: 0~4.0mmol/L, r≥0.990.
5. Stability: All package reagent, unopened and avoid light, preservation in 2~8 °C, stable 12 months, once opened, avoid light, preservation in 2~8 °C,stable 30 days.

【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 4.0mmol/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.