BIOBASE

Uric Acid (UA) Test Kit

(TBHBA)

【NAME】

Uric Acid (UA) Test Kit (TBHBA)

【INTEND USE】

This reagent is intended for the in vitro quantitative determination of Uric Acid(UA) in human serum,plasma.

【METHODOLOGY】

Uric acid becomes allantoin and hydrogen peroxide (H2O2) under uricase, In the peroxidase (POD), hydrogen peroxide and 4-Aminoantipyrine, TOOS becomes red complexes.The color of the reaction liquid is proportional to the concentration of uric acid.

$$\text{Uric Acid} + 2H_2O + O_2 \xrightarrow[\text{POD}]{\text{Uricase}} \text{allantoin} + CO_2 + H_2O_2$$

$$\text{TBHBA} + \text{4-AAP} + 2H_2O_2 \longrightarrow \text{Indamine} + 3H_2O$$

【STABILITY AND STORAGE】

Unopened, avoid light preservation in 2 ~ 8 ℃, valid for 12 months;
Opened, avoid light preservation in 2 ~ 8 ℃, 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: 20~ 25℃ preservation stability in 3 days; 4～8℃ preservation stability in 3 days; -20℃ preservation can be stable for 6 months.

When the ascorbic acid concentration of sample≤1704 μ mol/L;bilirubin concentrations≤684μmol/L,hemoglobin hemoglobin≤10.00g/L, triglyceride concentrations≤22.6 mmol/L, was not observed clearly disturbance.

【APPLICABLE INSTRUMENT】

Fully automatic biochemical analyzer.

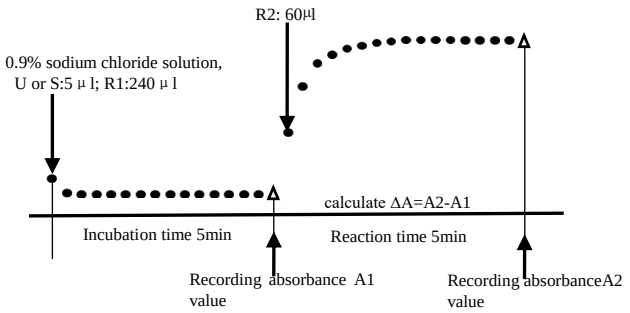
【SYSTEM PARAMETERS】

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	546 nm
Secondary Wavelength	660nm
Assay Type	Two Point End
Direction	Increase
Sample : Reagent 1: Reagent 2 Ratio	5:240:60
eg : Sample Vol	5 μL
Reagent1 Vol	240 μL
Reagent2 Vol	60 μL
Linearity	0～1190 μ mol/L
Testing	Deducting the reagent blank

【OPERATION STEPS】

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



【CALCULATION】

ΔAbs = [（A2- A1）Calibrator or Sample] － [（A2- A1）Blank]

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 automatic synthesize calibration curve for the calibration response quantity through the appropriate mathematical model (such as Logit/ Spline).Using UA calibration values to calibrate instrument ,within the scope of the reportable results,the instrument directly report reliable test results.

【REFERENCE RANGE】

Serum/Plasma:female:140～340 μ mol/L male:200～400 μ mol/L
Urine:female:≤4.76mmol/24h

By clinical trials, choose no less than 100 women or men 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】

UA testing is just one of the standard that clinicist 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≤0.1,（546nm,lcm optical path).
2.Precision: repeatability CV≤5%;batch variations R≤5%.
3.Accuracy: relative deviation ≤10%.
4.Linearity range: 0～1190 μ mol/L, r≥0.990

【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 1190 μ mol/L.If testing results is upper limit,dilute with 0.9% sodium chloride solution before test, results multiplied by the dilution ratio.

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

Biobase Biodustry(Shandong)Co.,Ltd
Add: Biobase Biological Industrial Park, Mingshui Economic Development Zone, Jinan, China, 250200
Tel: 0086-531-81219801/03 Fax: 0086-531-81219804