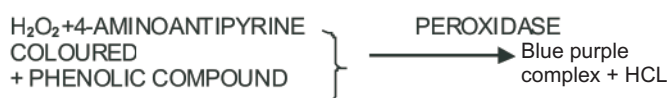


This reagent kit is for quantitative estimation of Uric Acid in serum, plasma or urine.

PRINCIPLE:

The substrate Uric Acid is converted into allantoin and hydrogen peroxide by the action of Uricase Chromogen, 4-aminoantipyrine and phenolic compound combined with hydrogen peroxide in presence of peroxidase gives coloured complex. The intensity of colour corresponds to uric acid concentration and is measured at 546 nm (530-560 nm) or with green filter.



CLINICAL SIGNIFICANCE:

Uric Acid is main end point product of nucleic acids and purine metabolism. Elevated levels are seen in clinical conditions like gout and renal failure. Acute infectious diseases severe uremia, toxemia of pregnancy and leukemia also causes increase level of uric acid. Low level of uric acid is seen in renal tubular syndrome.

SPECIMEN COLLECTION AND SOTRAGE:

- Fresh, fasting, unhemolysed serum sample is preferred.
- Plasma collected with heparin or EDTA as anti coagulant may be used.
- Samples are stable for 2 days when stored at 2-8° C.
- Urine sample collected for 24 hours period using 5% Sodium Hydroxide as preservative should be diluted 10 times using distilled water before uric acid determination.

PRECAUTION:

Estrom Uric Acid reagent is for invitro diagnostic use only.

REAGENTS

All the reagents are to be stored at 2-8° C

	No. of bottles	
	2 x 25 ml	4 x 25 ml
Reagent (Enzyme Chromogen)	2	4
Standard (8 mg/dl)	1	1

REAGENT RECONSTITUTION:

Ready to use. Store at 2-8°C, protected from light not in use.

REAGENT STORAGE AND STABILITY:

All reagents are stable up to expiry date indicated on the bottle label.

GENERAL INSTRUMENT PARAMETERS:

Reaction Type	: End Point
Slope of Reaction	: Increasing
Wavelength	: 546 nm (530-560nm)
Flowcell Temperature	: 37° C
Reagent Volume	: 1.0 ml
Sample Volume	: 25 µl (0.025 ml)
Standard Concentration	: 8 mg/dl
Units	: mg/dl
Incubation	: 5 Minutes
Zero Setting	: Reagent blank
Path length	: 1.0 cm

PROCEDURE:

Allow the sample and reagent to attain room temperature prior to use.

Dispense	Blank	Std.	Test
Reagent	1.0 ml	1.0 ml	1.0 ml
Standard	-	25 µl	-
Sample	-	-	25 µl

Incubate at 37° C for 5 minutes. Mix well and read at 546 nm (530-560 nm) or against green filter

LINEARITY:

This method is linear for Uric Acid values up to 25 mg/dl. For sample with values higher than 25 mg/dl, dilute the sample using normal saline and repeat the assay. Apply proper dilution factor while calculation.

CALCULATIONS:

$$\text{Con. of uric acid in sample (mg/dl)} = \frac{\text{Abs. of Test}}{\text{Abs. of Std.}} \times 8$$

$$\text{Con. of uric acid in sample (mg/dl)} = \frac{\text{Abs. of Test}}{\text{Abs. of Std.}} \times 8 \times (10 \text{ urine Dilution Factor})$$

REFERENCE VALUE:

Male : 3.4-7.0 mg/dl
Female : 2.4-5.7 mg/dl
In Urine : 250-750 mg/24 hours urine

It is recommended that laboratories should establish their own normal range.

SPECIMEN

Unhemolysed Serum / Heparinised plasma / Urine.
Urine should be diluted 1:10 with distilled water before use.

Limitation & Interference:

No significant interference was observed from Bilirubin up to 25 mg/dl (Both conjugated and unconjugated Bilirubin) Hemoglobin up to 50 mg/dl, Lipemia as Triglycerides up to 2000 mg/dl, Ascorbic acid up to 100 mg/dl.

STORAGE AND STABILITY

All the reagents should be stored at 2-8°C and are stable till the expiry date mentioned on the labels.

BIBLIOGRAPHY:

- Barham, D, & Trinder P, Analyst 97 (1972) 142-145.
- TRIVEDI R.C, Reber, L.Berka, E, And Strong I. Clin. Chem 24: 1908 (1978)

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	Attention, see instructions for use		Consult Instructions For Use
	For in vitro diagnostic use only		Catalog #
	Store between 2-8°C		Lot Number
	Do not use if package is damaged		Date of Manufacturing
	Manufacturer		Use by