

# BHAT BIOSCAN™

Pack size. P -50ml

## PHOSPHORUS

Ammonium Molybdate method

Cat. No. P - 50

### Principle:

In acidic solution, phosphorus reacts with molybdate to form phosphomolybdate complex. The change in absorbance is due to complex formation is measured at 340nm, which is directly proportional to the concentration of the phosphorus.

### Reagent Composition:

1. Molybdate reagent
2. Phosphorus standard 4 mg/dl

### Reagent Preparation:

Reagent is ready to use.

### Storage & Stability:

Store at 2-8° C, and keep away from light. Unopened reagent is stable until expiry date stated on the label.

### Sample:

Unhemolysed serum or heparinised plasma can be used.

### Procedure:

Let stand reagents and specimens at room temperature.

Tube	Blank	Standard	Test
Reagent	1000µl	1000 µl	1000 µl
Standard	-	20 µl	-
Sample	-	-	20 µl

Mix and Incubate @ room tempt. for 5 min. Read the absorbance at 340 nm against reagent blank.

### Calculations:

Calculate the result as follows:

$$\text{Phosphorus (mg/dl)} = \frac{A_{\text{sample}}}{A_{\text{standard}}} \times \text{Std.}$$

### Expected Value:

	Serum	Urine
Adult	: 2.5-4.8 mg/dl	340-900mg/24hr
Children:	4.0 -7.0 mg/dl	530-840mg/24hr

Each lab should optimize its own normal range.

### Quality Control:

The assay linear up to 10mg/dl. Use always QC sera to analyze the performance of the assay.

### Reference:

1. Robers, BN. et al., Clin.Chem.24: 1836 (1978).