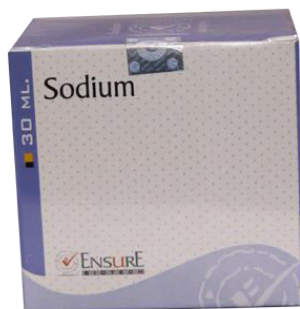


# SODIUM MONO TEST



### INTENDED USE:

This Reagent kit is intended for the 'in vitro' quantitative determination of Sodium in Serum

### PRINCIPLE:

The method is based on reaction of sodium with a selective Chromogen producing a chromogen producing a Chromophore whose absorbance is directly proportional to sodium concentration in the sample

### CLINICAL SIGNIFICANCE:

Sodium is major extracellular cation. Sodium with its associated cations provides the bulk of osmotically active solute in the plasma thus effecting the distribution of body water significantly. A shift of the sodium into the cells or a decrease of the extra cellular fluid volume affects circulation renal function and nervous system function. Elevated Sodium levels are associated with dehydration, central nervous system trauma and hyperadrenocorticism of dehydration. While low sodium levels are found during hypoadrenalism, severpylori and renal disease.

### KIT CONTENTS & STORAGE

Sodium Reagent                    30ml    50x1ml    25 x1 ml  
Sodium Standard 150mEq/L    1 ml    1ml        1ml  
Reagents are Store at RT

### SAMPLE COLLECTION AND STORAGE :

Serum or heparinized plasma.  
Sodium in sample is stable for 2 weeks at 2-8° C

### REAGENT PREPARATION

All Reagents Are Ready To Use.

### SYSTEM PARAMETERS:

Reaction type                    :        End Point  
Wave length                    :        630 nm  
Cuvette                            :        1 cm  
Zero setting                     :        Reagent Blank  
Reagent volume                :        1.0 ml  
Sample volume                 :        10ml  
Incubation time                :        5 mins  
Blank absorbance limit        :        1.2  
Standard concentration        :        150 mEq/L

### ASSAY PROCEDURE :

Pipette in to clean dry test tubes labeled as Blak (B),Standard (S),and Test (T) :

Test Procedure	B	S	T
Sodium reagent	1.0 ml	1.0 ml	1.0 ml
Standard	-	10µl	-
Sample			10µl

Mix well and incubate at RT for 5 mins . Measure the absorbance of Standard (Abs.S ) and test (Abs.T) against Reagent Blank at 630 nm

### CALCULATION:

Concentration of sodium mEq/L : (Abs .T/Abs.S) x 150

### QUALITY CONTROL:

For accuracy it is necessary to run known controls with every assay.

### NORMAL VALUES:

Serum/Plasma                    :    135 155 mEq/L

Urine                                :    40 220 mEq/L

It is recommended that each laboratory establish its own normal range representing its patient population

# SODIUM MONO TEST



## **LINEARITY :**

This Procedure is linear up to 180mEq/l. If values exceed this limit dilute the sample with distilled water and multiply results with proper dilution factor.

## **NOTE :**

As sodium is very widely distributed ion, care should be taken to avoid any contamination .All glassware being used for the test should first be rinsed with 1% or 0.1 N HN03 and then with good quality deionised water before use.

## **BIBLIOGRAPHY:**

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