SODIUM

Colorimetric, Endpoint

REF: SOD-MC-0620 (6X20ml)
SOD-MC-0420 (4X20ml)
SOD-MC-0225 (2x25ml)

INTENDED FOR USE:

For the quantitative determination of **Sodium** in serum.

PRINCIPLE:

The Present method is based on reaction of sodium with a selective chromogen producing a chromophore whose absorbance varies directly at the concentration of sodium in test.

SPECIMEN COLLECTION:

Freshly drawn non hemolysed serum is the specimen of choice.
Serum Sodium is stable for at least 24 hours at room temperature and two weeks at 2-8°C. Serum or heparinised plasma, CSF & Urine. Urine diluted 1+1 with distilled water can be used for sodium estimation.

REAGENT COMPOSITIONS :

R1 Standard	Sodium	150 mEq/l
R2 Color Reagent	Color reagent	

PACKAGE: Collection and storage.

Store all reagents at +15-25ºC the reagents are stable until the expiration date as indicated on the label.

PRECAUTIONS & WARNING :

Avoid pipette with mouth.
The preparation, according to current regulation, is classified as not dangerous.
The total concentration of non-active components (preservatives, detergents, stabilizers) is below the minimum required for citation.
Anyway handle with care, avoid ingestion, avoid contact with eyes, skin and mucous membranes. The samples must be handle as potentially infected from HIV or Hepatitis.

REAGENT PREPARATION & STABILITY :

Liquid reagents must be at room temperature (+15-25°C) before using. The remaining stability after opening the bottles is 1 month at (15 –25ºC)

REQUIRED MATERIALS NOT PROVIDED:

General Laboratory Equipment and instrumentations.

PROCEDURE:

Wavelength:	630nm (620-640)
Optical path:	1 cm light path
Temperature:	+15 -25°C.
Reading:	Against reagent blank
Assay type:	End Point

Pipetting in tubes :

	BLANK	STANDARD	SAMPLE
Reagent (R2)	1ml	1ml	1ml
Distilled water	10 µL		
Standard		10 µL	
Sample			10 µL

Mix, incubate for **5** min at room temperature (+15-25°C.)
Read the absorbance of standard and sample tubes.
Volumes can be proportionally modified.
This methodology describes the manual procedure to use the kit.
For automated procedure, ask for specific application.

CALCULATION:

$$\text{Sodium mEq/l} = \frac{\text{(A) Sample}}{\text{(A) Standard}} \times 150$$

EXPECTED VALUE:

Serum: 135 – 150 mEq/l

The above mentioned values are to be considered as a reference. It is strongly recommended that each laboratory establish its own normal range according to its geographic area, according to IFCC protocol.

WASTE DISPOSAL:

The disposal of the product must be in accordance with local regulation concerning waste disposal.

QUALITY CONTROL:

It is recommended to execute the quality control at every kit utilization to verify that values are within the reference range indicated by the methodology.

Sensitivity :

When run as recommended, the minimum detection limit of the assay 55 mEq/l.

Linearity :

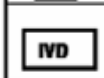
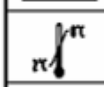
The assay is linear up to Sodium 180 mEq/l

INTERFERENCE:

Turbid or Icteric serum produce falsely elevated results.

REFERENCES:

1- Tietz, N.W., Fundamentals of Clinical Chemistry, W.B.Saunders Co., Phila, P.A.p.874.
2- Henry R.F., et, al, Clinical Chemistry Principles and Technics. 2nd Ed, Harper and Row, Harper and 3- Row, Hargersein, M.D.(1974).
4- Maruna RFL., Clin Chem. Acta. 2:581, (1958).
5- Trinder, P:Analyst, 76:596, (1951) .

	Consult Instruction for Use
	Caution Consult Accompanying Documents
	In Vitro Diagnostic Medical Device
	Temperature Limitation
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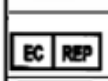	Authorized Representative In The European Community
	Catalogue Number
	Batch Code
	Use By

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