

ELECTROLYTES,
PLASMA/
SERUM

Orderable - LYTE

Turn Around Time: 4 hours

STAT: 1 hour

Alternate Name(s):

Sodium
Potassium
Chloride
CO2
GAP

Specimen:

Adult	Pediatric
4.5 mL Green (Lithium Heparin) top Vacutainer	0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube
Serum from a 5 mL Gold top or 6 mL Red top is also acceptable	

Collection Information:

Collect blood aseptically in a Vacutainer tube.

Avoid hemolysis.

Reference Ranges:

Sodium:	135-145 mmol/L
Potassium:	3.5-5.0 mmol/L (<3 months: 4.0-6.5 mmol/L)
Chloride:	98-107 mmol/L
CO ₂ :	22-29 mmol/L

Interpretive Comments:

Of use in monitoring electrolyte status, interpretation of acid-base balance and evaluation of hydration status.



Laboratory:
Core Lab



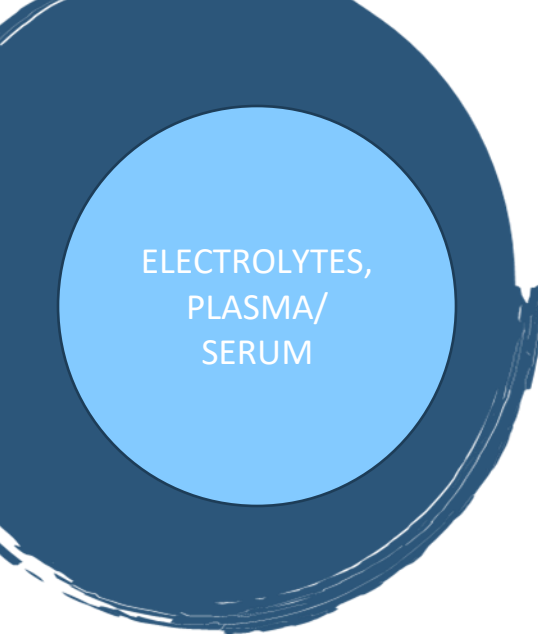
Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
For Sodium, Potassium &
Chloride: Ion Selective
Electrodes
Co2: Enzymatic rate



Test Schedule:
As required



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Potassium: potassium is largely intracellular cation and plasma levels are, at best, only a general guide to the total body potassium content. In some cases (e.g. untreated diabetes), plasma potassium may be increased when total body potassium is depleted.

CO₂: for complete evaluation of acid-base status, Blood Gases should be ordered. Decreased in metabolic acidosis, increased in metabolic alkalosis, and chronic respiratory acidosis.

Gap calculation is $\text{Gap} = \text{Sodium} - (\text{Chloride} + \text{Bicarbonate})$

Comments:

Potassium results may be affected by hemolysis.

Storage and Shipment:

Serum/Plasma must be separated from the cells within 2 hours of collection. Store at 15-30° Celsius for no longer than 8 hours. Specimen can be stored at 2-8° Celsius for up to 48 hours. If analysis has not been started before 48 hours then the specimen must be frozen.