**Orderable - LYTE**

**Turn Around Time:** 4 hours  
**STAT:** 1 hour

**Alternate Name(s):**
Sodium  
Potassium  
Chloride  
CO2  
GAP

**Specimen:**

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum from a 5 mL Gold top or 6 mL Red top is also acceptable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Collection Information:**

Collect blood aseptically in a Vacutainer tube.

Avoid hemolysis.

**Reference Ranges:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>135-145 mmol/L</td>
</tr>
<tr>
<td>Potassium</td>
<td>3.5-5.0 mmol/L (&lt;3 months: 4.0-6.5 mmol/L)</td>
</tr>
<tr>
<td>Chloride</td>
<td>98-107 mmol/L</td>
</tr>
<tr>
<td>CO2</td>
<td>22-29 mmol/L</td>
</tr>
</tbody>
</table>

**Interpretive Comments:**

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

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 Gap=Sodium-(Chloride+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.