Orderable - THEO
Turn Around Time: 3 days

Alternate Name(s):
Aminophylline
Theo-Dur
Somophyllin
Elixophyllin
Xanthine

Specimen:

<table>
<thead>
<tr>
<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mL Red top Vacutainer tube</td>
<td>0-2 years: 2 x 0.5 mL Red top</td>
</tr>
<tr>
<td></td>
<td>Microtainers</td>
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<tr>
<td></td>
<td>2-10 years: 3 mL Red top</td>
</tr>
<tr>
<td></td>
<td>Vacutainer tube</td>
</tr>
</tbody>
</table>

Collection Information:

Minimum volume of serum required is 0.5 mL.
Avoid gel-separator tubes.
Draw specimens at trough concentration prior to next regular dose.
Peak concentration is obtained 2 hours post oral dose.
Steady state is achieved during continuous IV therapy.
In premature infants and some neonates, the active metabolite caffeine may require simultaneous monitoring.
Separate as soon as possible. Repeated freezing and thawing of samples should be avoided.
Grossly hemolyzed or icteric specimens will not be tested.

Reference Ranges:

<table>
<thead>
<tr>
<th></th>
<th>55 - 110 µmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxic:</td>
<td>&gt;110 µmol/L</td>
</tr>
<tr>
<td>Critical Value</td>
<td>to be phoned to nurse or physician immediately</td>
</tr>
</tbody>
</table>

Comments:
Bronchodilator drug used in treatment of reversible bronchoconstriction. Aminophylline is a salt of Theophylline (80-85% by weight of this salt is Theophylline).

**Specimen Stability:**

Ambient: 8 hours  
Refrigerated: 7 days  
Frozen: 2 months

**Storage and Shipment:**

Store and ship serum frozen.