Lab Dept: Chemistry

Test Name: PROTEIN, TOTAL

**General Information**

Lab Order Codes: TP

Synonyms: Serum Protein

CPT Codes: 84155 – Protein; total, except refractometry

Test Includes: Total Protein concentration reported in g/dL.

**Logistics**

Test Indications: Useful for evaluating nutritional status, kidney disease, liver disease and many other conditions. If the total protein is abnormal, further tests must be performed to identify which protein fraction is abnormal to aid in identifying a specific diagnosis.

Lab Testing Sections: Chemistry

Phone Numbers:
- MIN Lab: 612-813-6280
- STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 hours

Special Instructions: N/A

**Specimen**

Specimen Type: Blood

Container: Green top (Li Heparin) preferred
- Alternate tube: SST (Marble, gold or red top tube)

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine venipuncture. Mix tubes containing anticoagulant by gentle inversion.
**Special Processing:** Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Analyze sample immediately or store at refrigerated temperatures.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimen; gross hemolysis; grossly icteric

### Interpretive

#### Reference Range:

<table>
<thead>
<tr>
<th>Reference ranges by Method:</th>
<th>Method Abbott</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 14 days:</td>
<td>5.3 – 8.3</td>
</tr>
<tr>
<td>15 days – 1 year:</td>
<td>4.4 – 7.1</td>
</tr>
<tr>
<td>1 – 5 years:</td>
<td>6.1 – 7.5</td>
</tr>
<tr>
<td>6 – 8 years:</td>
<td>6.4 – 7.7</td>
</tr>
<tr>
<td>9 – 18 years:</td>
<td>6.5 – 8.1</td>
</tr>
<tr>
<td>Adult:</td>
<td>6.0 – 8.3</td>
</tr>
</tbody>
</table>

**Critical Values:** N/A

**Limitations:** Excess patient hemolysis increases the total protein value, while excess bilirubin will decrease it.

**Methodology:** ABBOTT: Biuret

**References:**


Architect Total Protein Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, USA. December 2016

Alinity Total Protein Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, USA. December 2017

Updates:

12/22/2011: Turnaround time updated, previously listed as 4 hours.
7/8/2016: Turnaround time updated, previously listed as 2 hours.
11/24/2020: Updated method Abbott Alinity, removed method Siemens Vista