Iron Binding Capacity and Transferrin Saturation

CPT Code: 83550  
Order Code: C273  
Includes: Iron, Unsaturated Iron Binding Capacity, Total Iron Binding Capacity, and Transferrin Saturation  
ABN Requirement: No  
Synonyms: TIBC; Iron Binding Capacity; IBC; Serum Iron-Binding Capacity; Siderophilin; UIBC; % Saturation  
Specimen: Serum  
Volume: 0.5 mL  
Minimum Volume: 0.2 mL  
Container: Gel-barrier tube (SST, Tiger Top)

Collection:

1. Collect and label sample according to standard protocols.  
2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.  
3. Allow blood to clot 30 minutes.  
4. Centrifuge at 1300 rcf for 10 minutes.

Special Instructions: Specimens should be collected in the morning to avoid low results due to diurnal variation.

Patient Preparation: Patient should be fasting for 12 hours prior to being drawn.

Transport: Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions provided with the Cleveland HeartLab, Inc. shipping box.

Stability:

Ambient (15-25°C): 4 days  
Refrigerated (2-8°C): 7 days  
Frozen (-20°C): not acceptable  
Deep Frozen (-70°C): not acceptable
Causes for rejection: Specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits; hemolyzed and lipemic specimens

Methodology:

UIBC: Photometric

TIBC and Transferrin Saturation: Calculation

Turn Around Time: 1 to 3 days

Reference Range:

<table>
<thead>
<tr>
<th>Test</th>
<th>Age, Gender</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UIBC</td>
<td>All Ages, Male and Female</td>
<td>112-347 μg/dL</td>
</tr>
<tr>
<td>TIBC</td>
<td>All Ages, Male and Female</td>
<td>228-438 μg/dL</td>
</tr>
<tr>
<td>Transferrin Saturation</td>
<td>All Ages, Male</td>
<td>20-50%</td>
</tr>
<tr>
<td>Transferrin Saturation</td>
<td>All Ages, Female</td>
<td>15-50%</td>
</tr>
</tbody>
</table>

Intended Use: The total iron binding capacity test is used to identify individuals with either iron deficiency or iron overload, in conjunction with a serum iron test.

Limitations: Hemolysis of the sample will artificially elevate the iron levels. Excess bilirubin in the sample may lower iron levels.