

## Iron and Total Iron-Binding Capacity, Serum

**Test ID:** SFEC

### Profile Information:

Test ID	Reporting Name	Available Separately	Always Performed
IRON	Iron	No	Yes
TIBC	Total Iron Binding Capacity	No	Yes
SAT	Percent Saturation	No	Yes

### Useful for:

Screening for chronic iron overload diseases, particularly hereditary hemochromatosis

Screening for iron deficiency as the cause of anemia

Monitoring treatment for iron deficiency anemia

This test **should not be used** as the primary test for iron deficiency.

### Methods:

IRON: Colorimetric Assay

TIBC: Turbidity/Calculation

SAT: Calculation

### Reference Values:

IRON

Males: 50-150 mcg/dL

Females: 35-145 mcg/dL

TOTAL IRON-BINDING CAPACITY

250-400 mcg/dL

PERCENT SATURATION

14-50%

## Specimen Requirements:

<b>Patient Preparation:</b>	1. Fasting (12 hours) 2. For 24 hours before collection, patient should not take iron-containing supplements
<b>Preferred Collection Container/Tube:</b>	Serum gel
<b>Acceptable Collection Container/Tube:</b>	Red top
<b>Submission Container/Tube:</b>	Plastic vial
<b>Specimen Volume:</b>	1 mL
<b>Collection Instructions:</b>	1. Draw blood before noon (preferred). 2. Within 2 hours of collection, serum gel tubes should be centrifuged. 3. Within 2 hours of collection, red-top tubes should be centrifuged, and the serum aliquoted into a plastic vial.
<b>Minimum Volume:</b>	0.5 mL

## Specimen Stability Information:

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	7 days
	Frozen	180 days

## Cautions:

Serum iron, total iron-binding capacity, and percent saturation are widely used for the diagnosis of iron deficiency. However, serum ferritin is a much more sensitive and reliable test for demonstration of iron deficiency.

Measurement of serum iron, total iron-binding capacity, and percent saturation should not be used as the primary test for iron deficiency. It may be helpful in conjunction with ferritin and soluble transferrin receptor, especially in patients with inflammation.

## CPT Code:

83540-Iron

83550-Iron-binding capacity

**Day(s) Performed:** Monday through Sunday

**Report Available:** Same day/1 to 2 days

## Questions

Contact Nancy Benson, Laboratory Resource Coordinator at 800-533-1710.