

# Iron, Total and Total Iron Binding Capacity

**CPT Code:** 83540, 83550

**Order Code:** 7573

**Includes:** Iron, 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:** 1.0 mL

**Minimum Volume:** 0.5 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 for 10 minutes.

**Patient Preparation:** Samples should be taken in the morning from patients in a fasting state, since iron values decrease by 30% during the course of the day and there can be significant interference from lipemia.

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

## Stability:

**Ambient (15-25°C):** 6 days

**Refrigerated (2-8°C):** 7 days

**Frozen (-20°C):** 28 days

**Causes for rejection:** Specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits; hemolyzed and lipemic specimens

**Methodology:** Spectrophotometry

**Turn Around Time:** 1 to 3 days

**Reference Range:**

**Iron, Total**

Age	Male (mcg/dL)	Female (mcg/dL)
<1 Month	32-112	29-127
1-11 Months	27-109	25-126
1-3 Years	29-91	25-101
4-19 Years	27-164	27-164
20-29 Years	50-195	
≥30 Years	50-180	
20-49 Years		40-190
≥50 Years		45-160

**Iron Binding Capacity**

Age	Male mcg/dL (calc)	Female mcg/dL (calc)
<1 Month	94-232	94-236
1-5 Months	116-322	89-311
6-11 Months	176-384	138-365
1-19 Years	271-448	271-448
≥20 Years	250-425	250-450

**% Saturation**

Age	Male % (calc)	Female % (calc)
<1 Year	10-48	12-45
1-12 Years	12-48	13-45
13-19 Years	16-48	15-45
≥20 Years	20-48	16-45

**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.

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.*