

# Iron, Total

**CPT Code:** 83540

**Order Code:** 571

**ABN Requirement:** No

**Synonyms:** Fe; Fe<sup>2+</sup>

**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.

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

## Stability:

**Ambient (15-25°C):** 6 days

**Refrigerated (2-8°C):** 7 days

**Frozen (-20°C):** 31 days

**Causes for Rejection:** Specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits; hemolysis

**Methodology:** Spectrophotometry

**Turn Around Time:** 1 to 5 days

## Reference Range:

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

**Clinical Significance:** An iron test may be ordered to evaluate iron status. In addition, an iron test may be used to identify the cause of anemia, assess severity and monitor treatment. It may also be used to diagnose chronic gastrointestinal bleeding or blood disorders, including thalassemia and hemochromatosis.

**Limitations:** In patients treated with iron supplements or metal-binding drugs, the drug-bound iron may not react properly in the test, resulting in artificially low values. In the presence of high ferritin concentrations >1200 ug/L the assumption that serum iron is almost completely bound to transferrin is not valid anymore. Therefore, such iron results should not be used to calculate total Iron Binding Capacity (TIBC) or percent transferrin saturation (%SAT). Hemolysis may adversely affect results. In very rare cases, gammopathy, in particular type IgM (Waldenstrom's macroglobulinemia), may cause unreliable results.

*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.*