

**HEMOCHROMATOSIS CASCADE**

Test ID: HCASC

**EXPLANATION:** On March 26, 2014, MML will obsolete test HCASC, Hemochromatosis Cascade. The 2011 American Association for the Study of Liver Diseases guidelines recommends measuring ferritin and percent transferrin saturation for the diagnosis of Hereditary Hemochromatosis. Testing for ferritin, iron and total iron binding capacity with percent transferrin saturation are still offered individually and are the recommended alternative tests.

**RECOMMENDED ALTERNATIVE TESTS:**

FEC, Iron and Total Iron-Binding Capacity, Serum

FERR, Ferritin, Serum

**METHODOLOGY:**Iron: Photometric, Fe<sup>2+</sup>-FerroZine Complex

Transferrin and TIBC: Transferrin concentration is determined by an immunoturbidimetric assay on the Roche Cobas platform. Total iron-binding capacity (TIBC) is calculated from measured transferrin concentration.

Ferritin: Immunoenzymatic Assay

**REFERENCE VALUES:****IRON**

Males: 50-150 mcg/dL

Females: 35-145 mcg/dL

**TOTAL BINDING CAPACITY**

250-400 mcg/dL

**PERCENT SATURATION**

14-50%

**FERRITIN**

Males: 24-336 mcg/L

Females: 11-307 mcg/L

**SPECIMEN REQUIREMENTS:** Draw blood in a plain, red-top tube(s) or a serum gel tube(s) from a fasting patient (12 hour) before 12 noon. Hemolyzed specimen is not acceptable. Spin down and send 1 mL of serum refrigerated or frozen in plastic vial.

- NOTE:**
1. Supplements containing iron should be avoided for 24 hours prior to draw.
  2. Patient's age and sex are required on request form for processing.

**SPECIMEN STABILITY INFORMATION:**

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	7 days
	Frozen	6 months

**CPT CODES:**

82728-Ferritin

83540-Iron

83550-Iron-binding capacity

**DAY(S) SET UP:** Monday through Friday; 5 a.m.-12 a.m., Saturday; 6 a.m.-6 p.m.      **ANALYTIC TIME:** Same day/1 day

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or  
Suha Andrea, MML Laboratory Technologist Resource Coordinator  
Telephone: 800-533-1710