Overview

Useful For
Assessing muscle damage from any cause

Method Name
Latex Particle-Enhanced Immunoturbidometric Assay

NY State Available
Yes

Specimen

Specimen Type
Serum

Specimen Required
Container/Tube: 
Preferred: Red top
Acceptable: Serum gel

Specimen Volume: 1 mL
Specimen Minimum Volume
0.5 mL

Reject Due To
| Lipemia | Mild OK; Gross reject |

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum</td>
<td>Refrigerated (preferred)</td>
<td>14 days</td>
</tr>
<tr>
<td></td>
<td>Frozen</td>
<td>14 days</td>
</tr>
</tbody>
</table>

Clinical and Interpretive

Clinical Information
Myoglobin is a heme protein found in smooth and skeletal muscles. Serum myoglobin reflects a balance between intravascular release of myoglobin from muscle and renal clearance.

Previously serum myoglobin had been advocated as a sensitive marker for early acute myocardial injury (e.g., acute myocardial infarction). However, it is now recognized that cardiac troponin is a more specific marker for myocardial injury.
myocardial infarction: AMI). However, more recent studies indicate that other newer markers (eg, troponin) provide superior diagnostic utility in detecting early myocardial injury.

Elevation of serum myoglobin may occur as a result of muscle trauma, resuscitation, myopathies, AMI, shock, strenuous body activity, or decreased elimination during renal insufficiency. Extreme elevations occur in rhabdomyolysis.

Reference Values
< or =90 mcg/L

Interpretation
Elevated myoglobin levels are seen in conditions of acute muscle injury.

Cautions
Elevation is nonspecific for acute myocardial infarction. The test is of no value in this regard in the presence of renal failure, rhabdomyolysis, extensive trauma, acute peripheral vascular occlusion, or after seizures.

Serum levels rise in renal insufficiency.

Results are unreliable in lipemic serum; specimens that cannot be cleared by ultracentrifugation will be rejected.

Clinical Reference


Performance

Method Description
Particle-enhanced immunoturbidimetric assay. Latex-bound antimyoglobin antibodies react with antigen in the sample to form an antigen/antibody complex that after agglutination can be determined turbidimetrically. (Package insert: Tina-quant Myoglobin Gen.2. Roche Diagnostics, Indianapolis, IN, March 2010, V6)

PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Sunday, continuous

Analytic Time
1 day

Maximum Laboratory Time
2 days

Specimen Retention Time
7 days

Performing Laboratory Location
Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
This test has been cleared or approved by the U.S. Food and Drug Administration and is used per manufacturer’s instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information
83874

LOINC® Information

<table>
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<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
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<tbody>
<tr>
<td>MYGLS</td>
<td>Myoglobin, S</td>
<td>2639-3</td>
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<tr>
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