Lab Dept: Chemistry  

Test Name: LACTATE DEHYDROGENASE (LD)

**General Information**

Lab Order Codes: LDH  
Synonyms: LDH; LD  
CPT Codes: 83615 – Lactate Dehydrogenase  
Test Includes: Lactate dehydrogenase concentration reported in U/L.

**Logistics**

Test Indications: Lactate dehydrogenase is an enzyme that is found in almost all body tissues. LD is used as a general marker of injury to cells. LD is used to diagnose myocardial infarction, hepatic congestion, severe shock, renal disease, progressive muscular dystrophy, and pulmonary embolism.

Lab Testing Sections: Chemistry  
Phone Numbers:  
MIN Lab: 612-813-6280  
STP Lab: 651-220-6550  
Test Availability: Daily, 24 hours  
Turnaround Time: 2 hours  
Special Instructions: N/A

**Specimen**

Specimen Type: Blood  
Container: Green top (Li Heparin) tube, preferred  
Alternate: Red, marble or gold top tube  
Draw Volume: 0.6 mL blood  
Processed Volume: 0.2 mL serum/plasma  
Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.
### Special Processing:
Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures.

### Patient Preparation:
None

### Sample Rejection:
Mislabeled or unlabeled specimen; specimens other than heparinized plasma or serum

### Interpretive

#### Reference Range:

<table>
<thead>
<tr>
<th>Age</th>
<th>Range (U/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male/Female</strong></td>
<td></td>
</tr>
<tr>
<td>0 - &lt;15 days</td>
<td>309 - 1222 U/L</td>
</tr>
<tr>
<td>15 days - &lt;1 year</td>
<td>163 - 452 U/L</td>
</tr>
<tr>
<td>1 year - &lt;10 years</td>
<td>192 - 321 U/L</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
</tr>
<tr>
<td>10 - &lt;15 years</td>
<td>157 - 272 U/L</td>
</tr>
<tr>
<td>15 - &lt;19 years</td>
<td>130 - 250 U/L</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
</tr>
<tr>
<td>10 - &lt;15 years</td>
<td>170 - 283 U/L</td>
</tr>
<tr>
<td>15 - &lt;19 years</td>
<td>130 - 250 U/L</td>
</tr>
<tr>
<td><strong>Adult Male/Female</strong></td>
<td></td>
</tr>
<tr>
<td>Adults</td>
<td>125 – 220 U/L</td>
</tr>
</tbody>
</table>

### Critical Values:
N/A

### Limitations:
LD concentrations are increased by excess hemolysis.

### Methodology:
IFCC-recommended forward reaction: Lactate to Pyruvate

### References:
Abbott Alinity c Lactate Dehydrogenase Reagent Kit Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL 60064, USA, Revised February 2018
Bio-Rad Liquichek Multiqual 1,2,3, Unassayed Control Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

CALIPER Reference Range Studies, Accessed October 27, 2020

Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714


Updates:

2/8/2016: Update alt tube types