### General Information

**Lab Order Codes:** LH  
**Synonyms:** LH; Lutropin  
**CPT Codes:** 83002 – Gonadotropin; luteinizing hormone (LH)  
**Test Includes:** LH concentration measured in mIU/mL.

### Logistics

**Test Indications:** Luteinizing hormone (LH) is secreted by the anterior pituitary in response to gonadotropin-releasing hormone. LH secretion is regulated by a balance of positive and negative feedback mechanisms involving the hypothalamic-pituitary axis and the pituitary. FSH and LH play a critical role in maintaining the normal function of the male and female reproductive systems.

**Lab Testing Sections:** Chemistry  
**Phone Numbers:** MIN Lab: 612-813-6280  
STP Lab: 651-220-6550  
**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 1 day  
**Special Instructions:** N/A

### Specimen

**Specimen Type:** Blood  
**Container:** Preferred: Green top (Li Heparin) tube  
Alternate: Red, marble or gold top tube  
**Draw Volume:** 1.5 mL (Minimum: 0.75 mL) blood  
**Processed Volume:** 0.5 mL (Minimum: 0.25 mL) plasma/serum  
**Collection:** Routine venipuncture
Special Processing: Lab Staff: Centrifuge specimen, remove plasma/serum aliquot into a plastic sample cup. Store at 2-8 degrees Centigrade for up to 7 days.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

**Interpretive**

<table>
<thead>
<tr>
<th>Reference Range:</th>
<th>Age</th>
<th>Female Range (mIU/mL)</th>
<th>Male Range (mIU/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;3 months:</td>
<td>0 – 2.41</td>
<td>0.19 – 3.81</td>
</tr>
<tr>
<td></td>
<td>3 mo – &lt;1 year:</td>
<td>0 – 1.18</td>
<td>0 – 2.89</td>
</tr>
<tr>
<td></td>
<td>1 - &lt;10 years:</td>
<td>0 – 0.33</td>
<td>0 – 0.33</td>
</tr>
<tr>
<td></td>
<td>10 - &lt;13 years:</td>
<td>0 – 4.34</td>
<td>0 – 4.34</td>
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<tr>
<td></td>
<td>13 - &lt;15 years:</td>
<td>0.37 – 6.52</td>
<td>0 – 4.11</td>
</tr>
<tr>
<td></td>
<td>15 - &lt;17 years:</td>
<td>0 – 13.1</td>
<td>0.79 – 4.76</td>
</tr>
<tr>
<td></td>
<td>17 - &lt;19 years:</td>
<td>0 – 8.38</td>
<td>0.94 – 7.1</td>
</tr>
<tr>
<td></td>
<td>Adult:</td>
<td>0.57 – 12.07</td>
<td>0.57 – 12.07</td>
</tr>
</tbody>
</table>

**Menstruating Females:**

| Follicular phase: | 1.80 – 11.78 |
| Midcycle peak:    | 7.59 – 89.08 |
| Luteal phase:     | 0.56 – 14.00 |

**Critical Values:** N/A

**Limitations:** Heterophile antibodies may interfere with immunoassay tests.

**Methodology:** Chemiluminescent Microparticle Immunoassay (CMIA)

**References:**
Abbott Alinity i LH Reagent Instructions for Use (April 2018) Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA

Abbott Alinity i LH Calibrator Kit Package Insert (April 2018) Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA
CALIPER Reference Interval Studies (access 10/27/2020)


Updates:

7/22/2014: Method change, previously listed as Competitive Chemiluminescent Immunoassay
2/8/2016: Update alt tube types
12/9/2020: Updated for method Abbott Alinity, removed method Siemens Vista