Lab Dept: Chemistry

Test Name: LIPID PROFILE

General Information

Lab Order Codes: LIPL

Synonyms: Lipid Panel

CPT Codes: 80061 – Lipid panel

Test Includes: Total Cholesterol, Triglycerides, HDL Cholesterol and LDL Cholesterol

Logistics

Test Indications: Evaluation of cardiovascular risk.

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: See Patient Preparation

Specimen

Specimen Type: Blood

Container: Green (Li Heparin) top tube
Alternate: SST – Serum Separator (Red, marble or gold top tube)

Draw Volume: 1.5 mL (Minimum: 0.6 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.2 mL) plasma/serum

Collection: Routine blood collection.

Note: Venipuncture should occur prior to administration of N-Acetylcysteine (NAC) or Metamizole due to the potential for falsely depressed results.
Special Processing: Lab Staff: Centrifuge specimen, remove plasma/serum aliquot into a plastic sample cup. Sample to be run within 2 hours.

Patient Preparation: Patient should be on a stable diet for 3 weeks, and fast 9-12 hours before collection, recommended.

Sample Rejection: Mislabeled or unlabeled specimen

Reference Ranges:

<table>
<thead>
<tr>
<th>Reference Ranges:</th>
<th>All ages:</th>
<th>Range (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cholesterol:</strong> (mg/dL)</td>
<td>Normal</td>
<td>42 – 199</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>≥200</td>
</tr>
<tr>
<td><strong>HDL Cholesterol</strong></td>
<td>Normal</td>
<td>≥40</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>&lt;40</td>
</tr>
<tr>
<td><strong>LDL Cholesterol</strong></td>
<td>Abnormal high</td>
<td>≥130</td>
</tr>
</tbody>
</table>

**Triglycerides**

<table>
<thead>
<tr>
<th>Age</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
</tr>
<tr>
<td>0 – 9 years:</td>
<td>&lt;100</td>
</tr>
<tr>
<td>9 – 18 years:</td>
<td>&lt;130</td>
</tr>
<tr>
<td>Adult:</td>
<td>&lt;200</td>
</tr>
</tbody>
</table>

Critical Values: N/A

Limitations: N-Acetyl-L-Cysteine at therapeutically achieved concentrations may lead to falsely low results.

Methodology: Cholesterol: Enzymatic
HDL Cholesterol: Accelerator Selective Detergent
LDL Cholesterol: Measured, Liquid Selective Detergent
Triglycerides: Glycerol Phosphate Oxidase
References:

Abbott Alinity c Cholesterol Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA, December 2017,

Abbot Alinity c Multiconstituent Calibrator Package Insert, Abbott Diagnostics Division, Abbott Park, IL 60064, USA

Bio-Rad Liquichek Multiqual 1,2,3, Unassayed Chemistry Control Package Insert, Bio-Rad Laboratories


Abbott Alinity c Ultra HDL Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA. Revised February 2018

Bio-Rad Laboratories Liquichek Multiqual 1,2,3, Unassayed QC Product Insert, Bio-Rad Laboratories, Irvine, CA, USA

Abbott Alinity c Direct LDL Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA. Revised December 2017

Abbott Alinity Lipid Multiconstituent Calibrator, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA

Bio-Rad Liquichek Unassayed Mutualqual 1,2,3, Control Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

Abbott Alinity c Triglyceride Reagent Kit Instructions for Use, Abbott Diagnostics Division, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA. December 2017

Abbott Alinity c Multiconstituent Calibrator Package Insert, Abbott Diagnostics Division, Abbott Park, IL 60064, USA. December 2017

US Department of Health and Human Services (May 2001) National Institutes of Health Publication # 01-3305


Mayo Medical Laboratories (1/6/2012) online test catalogue

Updates:

2/21/2012: Testing moved to in house test at Children’s, previously listed as referred to Mayo Medical Laboratories.

6/18/2013: Added no gel restriction for red top tubes.

2/8/2016: Update alt tube types

3/29/2016: Updated collection information and references

9/10/2020: Updated reference range for HDL cholesterol

11/24/2020: Updated for method Abbott Alinity