
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

Interpretive

Reference Range:

Reference Ranges:	All ages:	Range (mg/dL)
Total Cholesterol: (mg/dL)	Normal	42 – 199
	Abnormal	≥200
HDL Cholesterol	Normal	≥40
	Abnormal	<40
LDL Cholesterol	Abnormal high	≥130
	Age	Range
Triglycerides	Normal	
	0 – 9 years:	<100
	9 – 18 years:	<130
	Adult:	<200

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,

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

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

2018 Guideline on the Management of Blood Cholesterol, GUIDELINES MADE SIMPLE, A Selection of Tables and Figures. American College of Cardiology, acc.org/GMSCholesterol. Updated June 2019

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

Bio-Rad Laboratories Liquichek Multiquel 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 Multiquel 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

US Department of Health and Human Services, Summary Report of the Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents:7

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