



NMR LipoProfile® Without Lipids (With Graph)

TEST: 123489 CPT: 83704

Synonyms

- Cholesterol
- Lipoprotein Analysis (LDL-P, HDL-P, LDL Size), Expanded

Test Includes Color graphical report; historical reporting (LDL-P); insulin-resistance score; lipoprotein particle number (LDL-P); particle concentration and size (total HDL-P, small LDL-P, LDL size).

Expected Turnaround Time 1 - 3 days

Turnaround time is defined as the usual number of days from the date of pickup of a specimen for testing to when the result is released to the ordering provider. In some cases, additional time should be allowed for additional confirmatory or additional reflex tests. Testing schedules may vary.

Related Documents For more information, please view the literature below.

[Spanning the Continuum of Cardiovascular Care](#)

[Understanding the NMR LipoProfile® Test Report](#)

[NMR LipoProfile® Assay Options Table](#)

[Lipoprotein Insulin Resistance Index \(LP-IR\): One Score to Assess Insulin Resistance and Type 2 Diabetes Risk](#)

- [Sample Report](#)

SPECIMEN REQUIREMENTS

Specimen Spun NMR LipoTube (preferred), serum from a plain red-top tube, plasma from a lavender-top (EDTA-no gel), **or** green-top (heparin-no gel) tube. Keep refrigerated and **ship with frozen cool packs.**

Volume 2 mL

Minimum Volume 1 mL

Container NMR LipoTube (black-and-yellow-top tube) is the preferred container, plain red-top tube, lavender-top (EDTA-no gel) tube, **or** green-top (heparin-no gel) tube.

Collection Collect specimen in NMR LipoTube (black-and-yellow-top tube), which is the preferred container. Plain red-top, green-top (heparin-no gel), or lavender-top (EDTA-no gel) tubes are also acceptable. Serum or plasma drawn in gel-barrier collection tubes other than the NMR LipoTube should **not** be used. **The LipoTube is the only acceptable gel-barrier tube.** Gently invert tube 8 to 10 times to mix contents and allow specimen to clot for 30 minutes upright at room temperature prior to centrifugation (Plasma tubes should not clot). Centrifuge specimen within two hours of collection at 1800xg for 10 to 15 minutes to separate serum/plasma from the red cells and to avoid red cell contamination during shipment. If the sample cannot be centrifuged immediately, the sample should be refrigerated (at 2°C to 8°C) and centrifuged within 24 hours of collection. **Note:** Centrifuging the specimen while still cold may negatively affect the migration of the gel to the serum/red cell interface and may increase the likelihood of specimens being contaminated with red cells during shipment. All specimens should be centrifuged by the client, **prior** to shipment to LabCorp, to ensure sample integrity. Do **not** open NMR LipoTube (black-and-yellow-top). Immediately after centrifugation, pipette separated red-top serum or green-top/lavender-top plasma into a transport tube and label accordingly (serum, heparin plasma, EDTA plasma). Keep samples refrigerated until shipment to the laboratory, and **ship with frozen cool packs.**

Storage Instructions Refrigerate all acceptable tube types as soon as possible after centrifugation and within 24 hours of collection. Keep refrigerated prior to shipment, and **ship on frozen cool packs.** Do **not** store at room temperature. Do **not** freeze the sample. Sample is stable refrigerated for six days.

Patient Preparation Patient should be fasting for 12 to 14 hours.

Causes for Rejection Unspun specimens; plasma/serum contaminated with red cells; citrated plasma (light blue-top tube); gross hemolysis; specimen received in inappropriate container; specimen stored at room temperature for more than a total preanalytical time of 24 hours; specimen more than six days old

TEST DETAILS

Use NMR LDL-P is a management tool used in appropriate high-risk patients (type 2 diabetes mellitus, metabolic syndrome, CVD risk equivalent, statin-treated patients) to adjudicate response to treatment and guide adjustment in therapy. It is used in conjunction with other lipid measurements and clinical evaluation to aid in the management of lipoprotein disorders associated with cardiovascular disease.

Methodology Nuclear magnetic resonance (NMR)

Additional Information The NMR LipoProfile® test is an FDA-cleared blood test that directly measures the amount of LDL circulating in the body. “LDL” is low-density lipoprotein and has long been recognized as a major causal factor in the development of heart disease. Although the relationship of increased LDL particle number and plaque buildup in the artery wall has been known since the 1950s, a diagnostic test did not exist to measure LDL particle number (LDL-P). Historically, LDL cholesterol, or LDL-C, has been used to estimate LDL levels to assess a patient’s LDL-related cardiovascular risk and judge an individual’s response to LDL-lowering therapy. Today, a more reliable measure of LDL exists that directly counts the number of LDL particles a patient has using NMR technology.

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CPT Statement/Profile Statement

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