

International Clinical Laboratories

Test Review



Direct LDL Assay

LDL carries cholesterol through the bloodstream to help the body build cell walls and produce steroid hormones. However, too much LDL sticks to blood vessel walls and blocks the flow of blood. The cholesterol carried by Low Density Lipoprotein is described as “bad cholesterol” since LDL transports cholesterol to the tissue and linked to the development of atherosclerotic lesions, Lowering LDL levels is the principal target of cardiovascular disease (CVD) therapy. Accurate LDL measurement is vital to establish CVD risk and to determine whether patients are achieving their LDL targets through therapy. LDL cholesterol can be measured directly or calculated from Total cholesterol, Triglyceride, and HDL-C using the Friedewald formula. Calculated LDL was originally introduced to measure LDL because no direct LDL assay was available. Direct measurement of LDL is determined without a calculation and has unique advantages when compared to calculated LDL, they are;

- Direct method does not require a fasting sample.

- Calculated LDL is inherently variable since it is based on three assays and a calculation.
- Calculated LDL has known limitations for example in patients with diabetes, liver disease or high triglyceride level.

Thus, ICL is happy to announce the availability of direct LDL measurement starting April 16, 2012. Please note, the indirect calculation method is also available as an option. For further information, please inquire in any of our branches or you can contact us online at info@icladdis.com or www.icladdis.com

Specimen: Serum or plasma, fasting is not a requirement.

References:

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1. **Laboratory test hand book 4th edition (1996)**
2. **Randox Architect Direct LDL assay (www.randox.com).**