



# LDL Cholesterol

Version: 1

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**Summary:** Procedure used to determine the concentration of LDL cholesterol in blood, serum, and plasma. LDL-cholesterol is determined by an elimination method to selectively remove HDL, VLDL, and IDL subfractions prior to assay of LDL-cholesterol as described for total cholesterol.

## Reagents and Materials:

Reagent/Material	Vendor	Stock Number
Lipid Calibrator	Prolabs	R85528
LDL Direct Reagent 1	Prolabs	R85556
LDL Direct Reagent 2	Prolabs	R85556

**Protocol:** Analysis by automated system Cobas Mira Plus

- 1) Calibrate Cobas for LDL by running dilutions of the lipid calibrator and the addition of the two direct reagents.
- 2) Sample handling as performed by the Cobas Mira Plus.
  - a) Pipette 3  $\mu$ L of sample into a cuvette slot.
  - b) Add 225  $\mu$ L of LDL Direct Reagent 1.
  - c) Add 75  $\mu$ L of LDL Direct Reagent 2.
  - d) Mixture is incubated at 37°C and spun for 10 minutes.
  - e) Absorbance is measured at 600 nm.

## Reagent Preparation:

LDL Direct Reagent 1: As supplied by vendor.

LDL Direct Reagent 2: As supplied by vendor.

Lipid Calibrator: Add 1mL of water to lipid calibrator bottle. Invert to mix, allowing 15 minutes for the reagent to settle. For the calibration, prepare serial dilutions.