

HDL-C L-Type | Immunoinhibition method

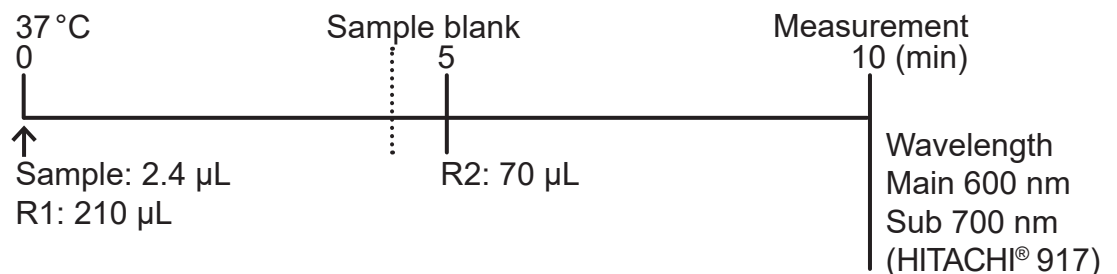
For the quantitative determination of High Density Lipoprotein Cholesterol (HDL-C) in serum

- Stable under severe condition
- Within-run imprecision: <1%
- Total precision (NCCLS EP5-T2): <1.5%
- No interference by other serum components
- Excellent correlation to the CDC reference method DCM (Designated Correlation Method)

Principle

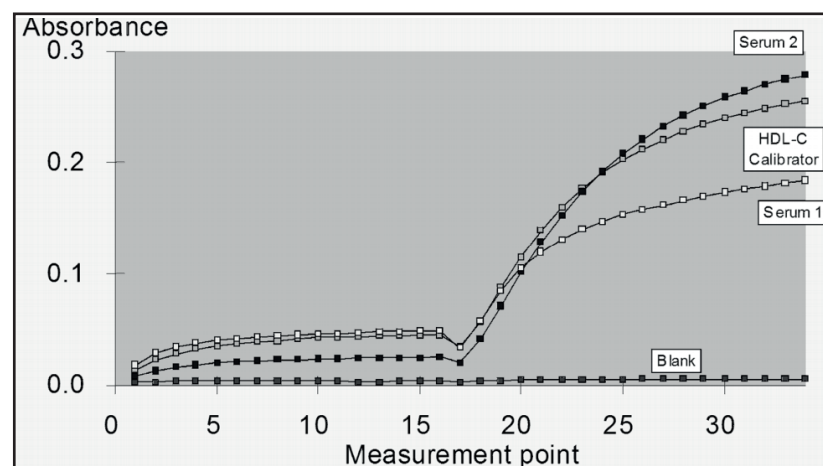
Anti-human β -lipoprotein antibody binds to lipoproteins (LDL, VLDL, and chylomicrons) other than HDL. The antigen-antibody complexes formed block enzyme reactions. Cholesterol esterase (CHE) and cholesterol oxidase (CO) react only with HDL-C. Hydrogen peroxide produced by the enzyme reactions with HDL-C yields a blue color complex upon oxidative condensation of F-DAOS [N-ethyl-N-(2-hydroxy-3-sulfoethyl)-3,5-dimethoxy-4-fluoroaniline, sodium salt] and 4-aminoantipyrine (4-AA) in the presence of peroxidase (POD). The HDL-C concentration in the sample can be obtained by measuring the absorbance of the blue color complex produced.

Procedure

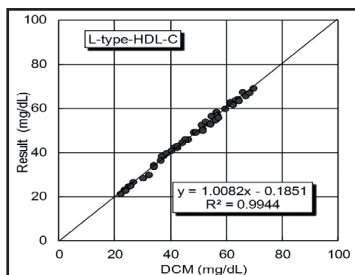


Reaction

Reaction time course



Correlation*



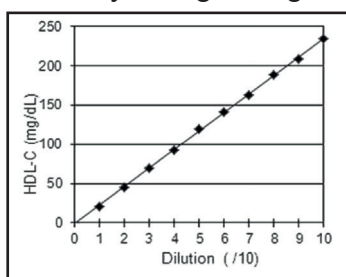
*CDC certification test: HDL-C L-Type in 2012

Range

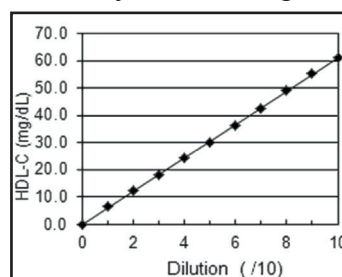
0.9 – 180 mg/dL

Linearity

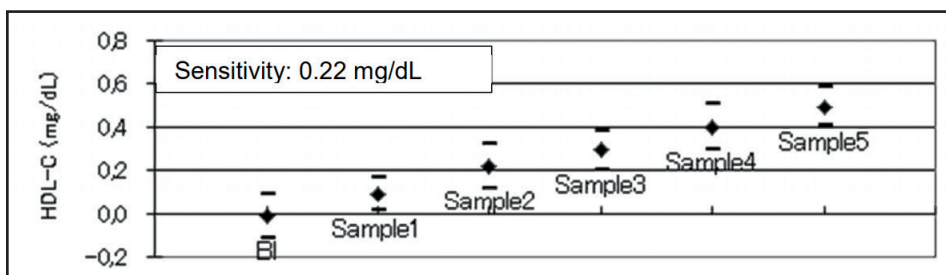
Linearity at high range: 180 mg/dL



Linearity at low range



Sensitivity/ Prozone



Interference

Hemolysis, ascorbic acid and bilirubin do not have significant effects on the assay.

CE Applications

| | | |
|--------|-------------|-------------|
| AU400 | Hitachi 902 | Hitachi 917 |
| AU600 | Hitachi 904 | Modular |
| AU640 | Hitachi 911 | Advia |
| AU5400 | Hitachi 912 | Beckman CX |

Ordering

| Code No. | Product | Content |
|-----------|---------------------------|-------------------|
| 418-72395 | HDL-C L-Type R1 | R1: 4 x 270 mL |
| 418-72495 | HDL-C L-Type R2 | R2: 4 x 90 mL |
| 412-72395 | HDL-C L-Type R1 | R1: 4 x 60 mL |
| 412-72495 | HDL-C L-Type R2 | R2: 4 x 20 mL |
| 993-70011 | HDL-C L-Type Pretreatment | R1: 18 L BULK |
| 990-70021 | HDL-C L-Type Enzyme | R2: 18 L BULK |
| 998-70022 | HDL-C L-Type Enzyme | R2: 6 L BULK |
| 416-51095 | HDL-C Calibrator | CAL: 4 x for 3 mL |