

HDL-C L-Type | Immunoinhibition method

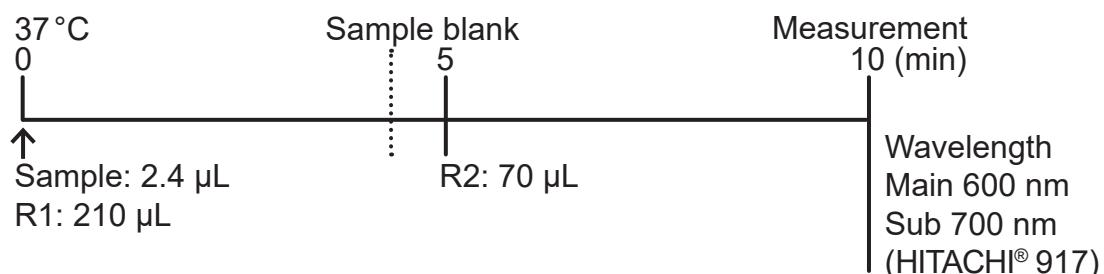
For the quantitative determination of High Density Lipoprotein Cholesterol (HDL-C) in serum

- 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

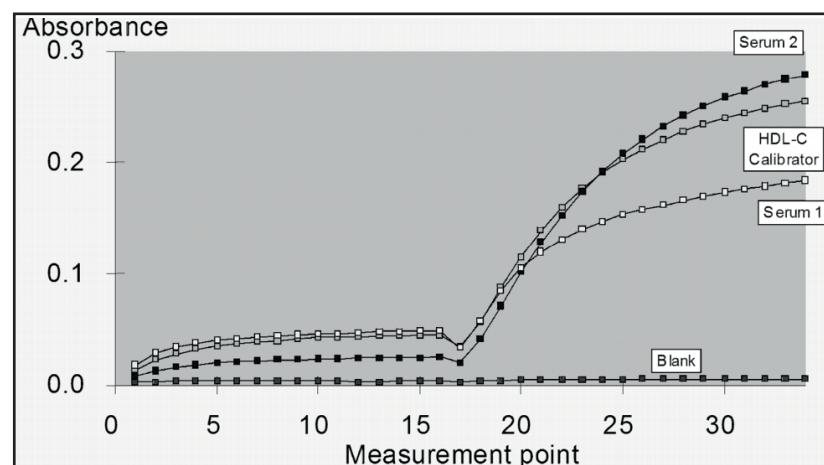
Anti-human β -lipoprotein antibody binds to lipoproteins (LDL, VLDL, and chylomicrons) other than HDL. The antigen-antibody complexes formed block enzyme reactions. Cholesterol esterase (CHE) and cholesterol oxidase (CO) react only with HDL-C. Hydrogen peroxide produced by the enzyme reactions with HDL-C yields a blue color complex upon oxidative condensation of F-DAOS [N-ethyl-N-(2-hydroxy-3-sulfopropyl)-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

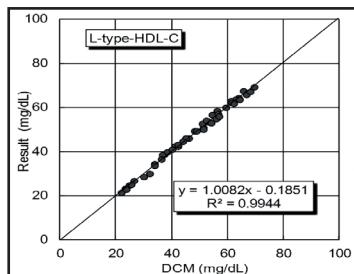


Reaction

Reaction time course



Correlation*



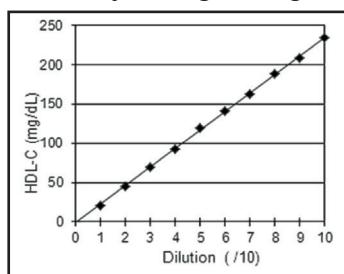
*CDC certification test: HDL-C L-Type in 2012

Range

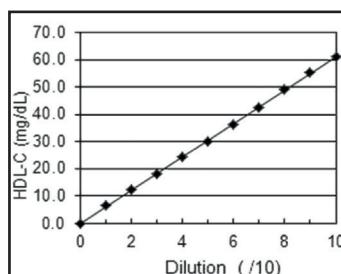
0.9 – 180 mg/dL

Linearity

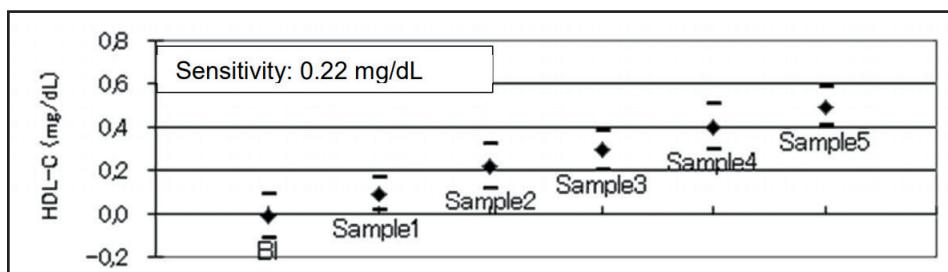
Linearity at high range: 180 mg/dL



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