



HDL Cholesterol

Stable Liquid Reagent
Precipitation/Enzymatic method
Store at 2-8 °C

PRINCIPLE

Low-density lipoproteins, very low-density lipoproteins and chylomicrons are specifically precipitated by Phosphotungestic acid and Magnesium ions and can be removed by centrifugation. High-density lipoproteins (HDL) remain in the supernatant which will be determined by enzymatic method (SYRBIO Cat. No. 0601, 0602, 0603).

REFERENCE VALUES

	mg/dl	mmol/dl
Men	39.4 - 60.7	1.02 - 1.57
Women	47.0 - 76.3	1.22 - 1.98
Children	49.7 - 70.7	1.28 - 1.83

These ranges are given for orientation only, each laboratory should establish its own normal ranges.

SAMPLES

Serum, Heparin Plasma.
Free of hemolysis . Removed from the blood clot as soon as possible.
HDL cholesterol in serum stable for 7 days at 2-8°C.

REAGENTS

R ₁	
Phosphotungestic acid	0.55 mmol
Magnesium Chloride	25 mmol
R ₂	
Standard	50 mg/dl

PROCEDURE

Sample	500 µl
Reagent (R ₁)	1.0 ml

Mix well, allow to stand for 10 minutes at room temperature and centrifuge at 5000 rpm for 10 minutes. Collect the supernatant and proceed it as a sample in the total cholesterol determination using JOURILABS cholesterol Kit .

	Blank	Standard	Sample
Standard - 50 mg/dl	-	50 µ l	-
Supernatant	-	-	50 µl
Cholesterol Reagent	1 ml	1 ml	1 ml

Mix well, incubate at 25°C for 20 minutes or at 30°C for 12 minutes, or at 37 °C for 10 minutes then read

the optical density (O.D). The color is stable for 30 minutes.

CALCULATION

$$\text{Cholesterol HDL (mg/dl)} = \frac{\text{O.D Sample}}{\text{O.D Standard}} \times 50 \times 3 \text{ (dilution)}$$

LINERARITY

The test is linear up to 275mg/dl cholesterol concentration.

NOTES

- Sample and reagent volumes may be varied as long as the ratio is maintained.
- After centrifugation, the supernatant must be clear, if not, dilute the serum with distilled water.

SENSITIVITY

It is recommended that each laboratory established its own range of sensitivity as this is limited by the sensitivity of the spectrophotometer used.

BIBLIOGRAPHY

- Castelli et al. Circulation 1975, 55, 767
- Burstein M et al. Lipid Res. 1970, 11, 583.
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- Gordon T. et al. Amer. J. Med. 1977, 62, 707.
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- Fruchart J.C. Rev. Fr. des laboratoires 1982, 103, 7-17.

The following symbols are used on labels



For in vitro diagnostic use



Use day (last day of the month)



Temperature limitation



Batch code



Code