

HDL – CHOLESTEROL

Enzymatic Colorimetric Method 100 Tests

PRINCIPLE :

Phosphotungstic acid and magnesium ions selectively precipitating all lipoproteins except the HDL fraction – cholesterol present in the supernatant can be determined by the same method used for total cholesterol .

REAGENTS :

1.	Precipitating reagent : Phosphotungstic acid Magnesium chloride	0.02 mol / L 1 mol / L
2.	Standard cholesterol	50 mg / dL (1.29 mmol/L)
	Additional Reagent: Cholesterol Kit	

STABILITY :

The reagents are stable up to the expiry date specified when stored at +4 to +8 °C .

SAMPLES :

Fresh serum. Heparin or EDTA plasma may be used. **Sample should not be frozen.**
HDL-Cholesterol is stable up to 5 days at +4 to +8°C.

PROCEDURE:

Precipitation :

Sample	0.20 ml
Precipitating reagent (R1)	0.02 ml

Vortex, let stand 10 min., centrifuge for 15 min. at 3000 rpm.

Measure HDL –Cholesterol in the supernatant using the same method for total Cholesterol.

Determination of HDL-Cholesterol :

	Blank (ml)	Standard (ml)	Sample (ml)
Distilled water	0.05	-	-
Standard (R2)	-	0.05	-
Supernatant	-	-	0.05
Working reagent	1.00	1.00	1.00

Mix, incubate at 37°C for 10 min. Read absorbance of sample (A_{Sample}) and standard (A_{Standard}) against the blank at 500 nm, (495 – 550 nm).

CALCULATION :

HDL – Cholesterol in sample (mg / dl)

$$= \frac{A_{\text{Sample}}}{A_{\text{Standard}}} \times 55$$

NORMAL VALUES :

Men 30 – 70 mg/dL	Women 35 – 85 mg/dL
Total Cholesterol	
Risk ratio = $\frac{\text{Total Cholesterol}}{\text{HDL-Cholesterol}}$	
Average risk ratio: men 4.97 Women 4.44	

QUALITY CONTROL :

For accuracy and reproducibility control:-
Assayed Multi – Sera, Normal and Elevated

REFERENCES :

- Burstein M. et al. (1970): Lipid Res. 11, 583.
- Lopez – Virella M.F. et al. (1977): Clin. Chem. 23, 882.

HDL – Cholesterol

Enzymatic Colorimetric Method

Precipitating Reagent

+4 To +8°C

100 Tests

In vitro diagnostic use

CAT. No.

CH 12 30

REAGENTS

R1 Precipitating reagent 2 ml

R2 Standard 5 ml

CONTACTS

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