

# CHOLESTEROL FS\*

## Order information

Cat. No.	Kit size	
10 130 021	R 5 x	25 ml + 1 x 3 ml standard
1 1300 99 10 026	R 6 x	100 ml
10 130 023	R 1 x	1000 ml
10 130 030	6 x	3 ml standard

## Method

Enzymatic colorimetric test, "CHOD-PAP"

Determination of Cholesterol after enzymatic hydrolysis and oxidation. The colorimetric indicator is Chinonimine which is generated from 4-Aminoantipyrine and Phenol by Hydrogen Peroxide under the catalytic action of Peroxidase.

## Reagent preparation and stability

The reagent is ready-to-use and stable up to the end of the indicated month of expiry, if contamination is avoided and stored at 2 - 8 °C. The reagent must be protected from light.

Stability of standard: until expiry date, when stored at 2 – 25 °C

## Specimen

Serum, heparinized or EDTA plasma; Avoid hemolysis!

## Components and concentration in the test

GOOD's buffer	pH 6.7	50 mmol/l
Phenol		5 mmol/l
4-Aminoantipyrine		0.3 mmol/l
Cholesterol Esterase		≥ 200 U/l
Cholesterol Oxidase		≥ 50 U/l
Peroxidase		≥ 3 KU/l

**Standard:** 200 mg/dl (5.2 mmol/l)

## Notes

The reagent contains Sodium Azide (0.095 %) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.

## Clinical interpretation (see reference 4)

Suspect: over 220 mg/dl (5.7 mmol/l)  
Elevated: over 260 mg/dl (6.7 mmol/l)

As per recommendation of the European Consensus Conference it is recommendable to lower the Cholesterol level in blood of about 180 mg/dl for adults up to 30 years of age and to about 200 mg/dl for adults of over 30 years of age.

## References

- Richmond, W., Clin. Chem., 19, (1973), 1350 - 1356
- Roeschlau, P., Bernt, E., Gruber, W., Z. Klin. Chem. Klin. Biochem, 12, (1974), 403 - 407
- Trinder, P., Ann. Clin. Biochem., 6, (1969), 24
- Schettler, G., Nüssel, E., Arbeitsmed. Sozialmed. Präventivmed., 10, (1975), 25

\* fluid stable

## HITACHI 917 Chemistry parameters

Test / Type	CHOL				Ser/Pl				
Assay / Time / Point	1	Point End	A	10	A	34	0	0	0
Wave (2 <sup>nd</sup> /Primary)	700	A	505	A					
S.Vol (Normal)	2	0	0						
S.Vol (Decrease)	1	0	0						
S.Vol (Increase)	4	0	0						
Diluent	00951	99							
Reagent (R1) T1	180	0	#	60					Timing R1
Reagent (R2) T2	0	0	#	0					R2
Reagent (R3) T3	0	0	#	0					R3
Reagent (R4) T4	0	0	#	0					
Abs. Limit	12000	Increase	A						
Prozone Limit	32000	0	Lower	A					
Cell Detergent	Detergent 1	A							

Calibration	
Calibration type	Linear A A
Point	2 Span Point 2
Weight	0
Autocalibration	
Blank	Time Out
Span	Change Over
2Point	Blank A
Full	Blank A
SD Limit	0.1
Duplicate limit	10 % 200 Abs
Sensitivity limit	-99999 999999
S1 Abs limit	-32000 32000

Range	
Application Code	# Unit mg/dl A
Report Name	Cholesterol
Data Mode	On Board A
Control Interval	1000
Instrument Factor (Y=aX+b)	a= 1.0 b= 0.0
Technical Limit	0 750
Repeat Limit	0 750
Expected Value	
(Male)	Qualitative
1 Y A	Cancel A
100 Y A	(1) 0
	(2) 0
	(3) 0
	(4) 0
	(5) 0
(Female)	(6) 0
1 Y A	
100 Y A	
(Default)	Male A Range3 A

Others	
<Standard>	(1) (2) (3) (4) (5) (6)
Calib. Code	501 #
Concentration	0 *
Position	
Sample Volume	2 2
Diluent S.Vol	0 0
Diluent Volume	0 0

#) Data entry by the user

\*) Enter calibration or standard value