Total LIPIDS liquid

Colorimetric determination
on serum

4 x 100 ml **REF CM09-400**

PRINCIPLE

Total lipids in serum, after a heat treatment with sulphuric acid, react with phosphoric acid-vanillin mixture, developing a pink color whose intensity is proportional to the lipids concentration.

REAGENTS

Kit components:	REF CM09-400	Quantity
(*) REAGENT 1 Vanillin 7.8 mmol/L Phosphoric acid 12 mmol/L	**CM09-400R1**	**4x100 ml**
STANDARD (Std) Cholesterol 800 mg/dl (26.68 mmol/L)	**CM09-400S**	**1x4 ml**

STABILITY: stored at 15-30°C and tightly closed the reagents are stable up to the expiration date on the label

ADDITIONAL REAGENT NOT INCLUDED WITH THE KIT

Ultra pure sulphuric acid d = 1.84

SAMPLE

Serum

MANUAL ASSAY PROCEDURE

Wavelength:	530 nm (510-550 nm)
Optical path:	1 cm
Reading:	against blank reagent
Temperature:	100°C for lipo-sulphuric mixture room for the reaction
Method:	endpoint
Reaction:	20 minutes
Linearity:	up to 1500 mg/dl
Sample/reagent:	1/25

Pipette into pirex tubes labeled as follows:

	Sample	Standard
Sulphuric acid (d = 1.84)	2500 µl	2500 µl
Standard	---	100 µl
Sample	100 µl	---

Mix accurately and incubate in a hot bain-marie for 10 minutes.
Cool.
These are the lipo-sulphuric reaction mixtures of both sample and standard to be used to run the test.
Pipette into tubes or cuvettes labeled as follows:
B/R: blank reagent, S: sample, Std: standard:

	B/R	S	Std
Reagent 1	2500 µl	2500 µl	2500 µl
Standard lipo-sulphur. mixture	---	---	100 µl
Sample lipo-sulph. mixture	---	100 µl	---
Sulphuric acid (d = 1.84)	100 µl	---	---

Mix the tubes well and incubate for 20 minutes at 20-25°C.
Read the standard (Astd) and sample (As) absorbances against the blank reagent, within 45 minutes.

CALCULATION

lipids (mg/dl) = (As / Ast) x 800

lipids (mmmol/L) = (As / Ast) x 20.68

REFERENCE VALUES

Lipids in serum: 450-800 mg/dl

QUALITY CONTROL – CALIBRATION

A quality control program is recommended for all clinical chemistry laboratories.

PERFORMANCES CHARACTERISTICS

Linearity: up to 1500 mg/dl.
For higher values, dilute the samples and multiply the result by the dilution factor.

Within-run precision:

	Level 1	Level 2
Mean (mg/dl)	532	1105
DS	3.90	9.32
CV %	0.73	0.84

Between-run precision:

	Level 1	Level 2
Mean (mg/dl)	552	980
DS	6.00	19.5
CV %	1.09	1.99

Correlation
FAR kit for total lipids determination shows a correlation coefficient of 0.987 compared to another kit available on the market.

DISPOSAL

The product must be used for professional assay only. Dispose of the product according to national/international laws.

WARNINGS AND PRECAUTIONS

REAGENT 1
H314 Causes severe skin burns and eyes damage.

STANDARD
H225 Highly flammable liquid and vapor.

NOTES

1. (*) Dangerous reagents are marked by an asterisk. Refer to MSDS.
2. Reaction volumes can be proportionally changed.
3. Use only glassware without any trace of detergents.
4. Reagents require an accurate pipette due to their viscosity.
5. Chemistry analyzer parameters are available.

REFERENCE

1. Zöllner N., Kirsch K:, Z. ges. exp. Med., 135, 545 (1962)

MANUFACTURER

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IVD CE

KEY SYMBOLS

IVD	In Vitro diagnostic medical device
LOT	batch number
REF	catalog number
	temperature limits
	use by
	caution
	read instructions for use

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