BIOBASE

Total Cholesterol (CHO) Test Kit

(Enzyme Colorimetric)

【NAME】

Total Cholesterol (CHO) Test Kit (Enzyme Colorimetric)

【INTEND USE】

This reagent is intended for the in vitro quantitative determination of Total Cholesterol (CHO) in human serum or plasma.Measurement of serum cholesterol levels can serve as an indicator of liver function, biliary function, intestinal absorption, propensity toward coronary artery disease, thyroid function and adrenal disease.Cholesterol levels are impor tant in the diagnosis and classification of hyperlipoproteinaemias. Stress, age, gender, hormonal balance and pregnancy affect normal cholesterol levels.

【METHODOLOGY】

$$\text{Cholesterol ester} + H_2O \xrightarrow{\text{CHE}} \text{Free cholesterol} + \text{Fatty acid}$$

$$\text{Free cholesterol} + O_2 \xrightarrow{\text{CHO}} \text{Cholestenone} + H_2O_2$$

$$2H_2O_2 + \text{4-Aminoantipyrine} + \text{Chromogen} \xrightarrow{\text{POD}} \text{Red purple pigment}$$

【STABILITY AND STORAGE】

Unopened, avoid light preservation in 2 ~ 8 ℃, valid for 12 months;
Opened, avoid contamination preservation in 2 ~ 8 ℃, valid for 1 month.
Reagent is not allowed frozen.

【SPECIMEN COLLECTION AND HANDLING】

It is best to fresh Serum, heparin or EDTA anticoagulant blood plasma.
Don't use the blood sample collection bottle containing sodium fluoride.
Serum stability:2～8℃preservation stability in 3days;
In sample Bilirubin concentrations≤10mg/dL,Hemoglobin concentration ≤200mg/dL,TG≤1000mg/dL ,VitC≤10mg/dL was not observed clearly disturbance

【APPLICABLE INSTRUMENT】

Fully automatic biochemistry analyzer.

【SYSTEM PARAMETERS】

The following system parameters are recommended. Individual instrument applications are available upon request from the Technical Support Group

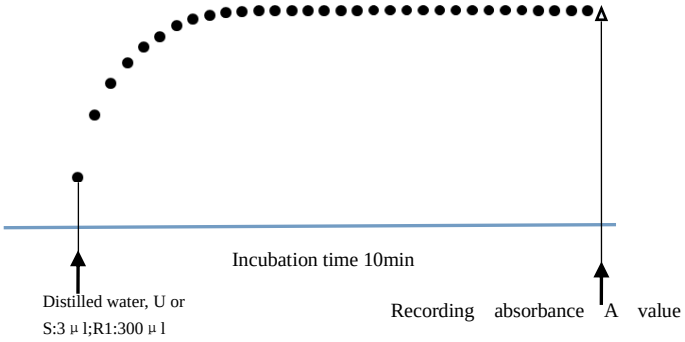
Temperature	37° C
Cuvette light path	1.0cm
Primary Wavelength	505 nm
Secondary Wavelength	700nm
Assay Type	One Point End
Direction	Increase
Sample : Reagent Ratio	1:100
eg : Sample Vol	3 μL
Reagent Vol	300 μL
Linearity	0～12.9mmol/L
Testing	Deducting the reagent blank

【ATTENTION】

1.Reagent contains sodium azide (toxic) preservatives, avoid contact with skin and mucous membrane.If necessary preventive measures should be taken use of reagents, reagent contact with skin and mucous membrane, please rinse with water, please go to a doctor if necessary.
2.The maximum linearity is 12.9mmol/L. If testing results is upper limit,dilute with 0.9% sodium chloride solution before test, results multiplied by the dilution ratio.

【OPERATION STEPS】

R:Reagent S:Calibrator U:Sample



【CALCULATION】

Use The Calibrator

$$\text{Sample CHO concentration} = \frac{\text{Sample } \triangle A}{\text{Calibrator } \triangle A} \times \text{Calibrator concentration}$$

【REFERENCE RANGE】

0～5.2mmol/L（0～200mg/dl）
By clinical trials, choose no less than 100 newborn or adults blood specimens, tested by automatic biochemical analyzer, and then processing the testing value with statistical method, calculating out the reference range.

【THE LIMITATION OF TEST RESULTS】

CHO testing is just one of the standard that clinicist diagnose the patient. Clinical physicians should according to patients' bodies, history and other diagnostic program, to get comprehensive judgment.

【THE INTERPRETATION OF TEST RESULTS】

Human error, the processing of specimen, analysis instrument deviation, etc. all can affect the measurement result； When one sample deviates from the expected value too far, need to be tested again.

【PERFORMANCE INDEX】

1.Reagent blank absorbance ≤0.5, (505nm, lcm optical path).
2.Precision: repeatability CV≤5%;batch variations R≤5%.
3.Accuracy: relative deviation ≤10%.
4.Linearity range: 0～12.9mmol/L, r≥0.990.
5. Stability :All package reagent, non corrosive gas and avoid light, preservation in 2~8 ℃, stable 12 months.
once opened, avoid light, preservation in 2~8 ℃,stable 30 days.

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