



Glucose GOD - PAP

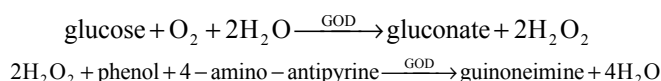
Enzymatic - colorimetric method /liquid

Cat.No. 101-0442

Size: 4x250 ml

PRINCIPLE:

Glucose is determined after enzymatic oxidation in the presence of glucose oxidase (GOD). The formed H_2O_2 reacts under catalysis of peroxidase (POD) with phenol and 4-amino-antipyrine to form quinoneimine. The intensity of the colour is proportional to the glucose concentration in the sample.



SAMPLE:

Serum, plasma or CSF.

Glucose is stable for 3 days at +2 °C to +8 °C.

REAGENTS:

- Reagent
Tris buffer, pH 7.4 92 mmol/L
Phenol 0.3 mmol/L
GOD 15000 U/L
POD 1000 U/L
4-amino-antipyrine 2.6 mmol/L
- Standard
Glucose Standard concentration see on the vial label

PREPARATION OF REAGENTS

Liquid reagent, ready to use.

This reagent is stable up to the date of expiration at +2 °C to +8 °C. Avoid direct sunlight.

PROCEDURE:

- Wavelength: 505 nm, Hg 546 nm (490 - 550 nm)
Cuvette: 1 cm light path
Temperature: 25 °C, 30 °C, 37 °C
Zero: reagent blank

1. Plasma or serum

Pipette into test tubes	Reagent blank	Standard	Sample
Standard	-	10 µl	-
Sample	-	-	10 µl
Working reagent	1000 µl	1000 µl	1000 µl

Mix and incubate for 30 min. at room temperature or 10 min. at 37°C. Avoid exposure to direct sunlight. Measure the absorbance of the standard and the sample against the reagent blank within 30 minutes.

NOTE:

Volumes can be proportionally changed.

CALCULATION:

$$\frac{A_{\text{sample}}}{A_{\text{standard}}} \times \text{stand. conc.} = \text{Glucose conc.}$$

EXPECTED VALUES:

Serum, plasma (fasting) 3.05 - 6.11 mmol/L (55 - 110mg/dL)

LINEARITY:

up to 27.75 mmol/L (500 mg/dL)

QUALITY CONTROL:

- | | | |
|----------|-----------|-------------------|
| CONTRO-N | 20 x 5 ml | Cat. No. 101-0083 |
| CONTRO-P | 20 x 5 ml | Cat. No. 101-0084 |

NOTE:

- Sample with glucose concentration > 500 mg/dL has to be diluted 1:2 with physiological solution (result x 2).
- Do not interfere: Hemoglobin (4g/L); Bilirubin (20 mg/L); Creatinine (100 mg/L), Galactose (1g/L) and EDTA (2 g/L)
- Reagent contains sodium azide as stabilizer. Do not swallow. Avoid contact with the skin and mucous membranes.
- Reagent 1 contains phenol, which is poisonous and caustic. Do not swallow, and avoid contact with skin. If solution comes into contact with skin, flush immediately with polyethylene glycol 400 or, lacking this, with large quantities of water.

REFERENCES:

- Trinder P.A.; An. Clin. Biochem. 6, 24 (1969).
- Dingemans, B. Ann. Biol. Clin. 33,3 (1975).
- Lott, J.A. Clin. Chem. 21, 1754 (1975)