GLUCOSE

Enzymatic Colorimetric Method 200 Tests

PRINCIPLE :

$$\text{Glucose} \xrightarrow{\text{Glucose oxidase}} H_2O_2 + \text{Gluconic acid}$$

$$2H_2O_2 + \text{phenol} + \text{4- amino–antipyrine} \xrightarrow{\text{peroxidase}} \text{Colored quinonemine} + 4\ H_2O$$

SAMPLE :

Serum or plasma

NORMAL VALUES :

70 – 100 mg. / dL (3.88 – 5.55 mmol/L)

REAGENTS :

1.	**Standard**	100 mg / dL (5.55 mmol/L)
2.	**Chromogen :**	
	Phenol	15 mmol / L
3.	**Buffer – Enzymes:**	
	Phosphate buffer	70 mmol / L
	Glucose oxidase	> 5000 U / L
	Peroxidase	> 500 U / L
	4 – Amino antipyrine	0.5 mmol / L

STABILITY :

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

PROCEDURE :

Working reagent : Mix equal volumes of reagent 2 and 3 immediately befor the assay .

	Blank ml	Standard ml	Sample ml
Standard	-	0.01	-
Sample	-	-	0.01
Working reagent	1.0	1.0	1.0

Mix well. Incubate for 10 min. at 37°C. Measure the absorbances of the sample (A_{Sample}) and the standard ($A_{Standard}$) against blank, at 510 nm. (490 - 530) . The color is stable for 30 min. Linearity up to 500 mg / dL .

CALCULATION :

Glucose Concentration

$$= \frac{A_{Sample}}{A_{Standard}} \times \text{Standard Conc.}$$

QUALITY CONTROL:

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

REFERENCE :

Trinder P . (1969) Ann . Clin . Biochem, 6, 24 .

BIODIAGNOSTIC
DIAGNOSTIC AND RESEARCH REAGENTS

GLUCOSE

Enzymatic Colorimetric Method
+4 to +8ºC **200 Tests**
In vitro diagnostic use

CAT. NO. **GL 13 20**

REAGENTS

R1 Standard	**2.5**	**ml**
R2 Chromogen	**100**	**ml**
R3 Buffer- Enzyme	**100**	**ml**

CONTACTS

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