



Glucose

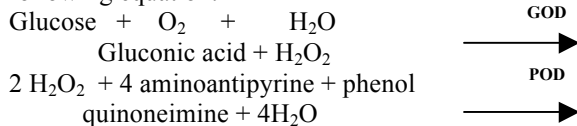
Liquid Reagent

Enzymatic & colorimetric method

Store at 2-8 °C

PRINCIPLE

Glucose is oxidized by glucose oxydase (GOD) to gluconate and hydrogen peroxide according to the following equation:



Mix well, incubate at 25°C for 30 minutes, or at 37° for 10 minutes, then read the optical density (O.D) against the blank, the color is stable for 1 hour.

CALCULATION

$$\frac{\text{O.D Sample}}{\text{O.D Standard}} \times \text{Standard concentration}$$

REFERENCE VALUES

Serum or plasma	65 -110	mg/dl
	3.61-5.55	mmol/l
Spinal fluid	50 – 70	mg/dl
	2.78 – 3.89	mmol/l

These ranges are given for orientation only. Each laboratory should establish its own normal ranges.

SAMPLES

Serum. Plasma collected on heparin fluoride or heparin iodoacetate . Spinal fluid.

REAGENTS

R₁: Enzymatic Reagent

Phosphate buffer pH 7.0	100 mmol/l
GOD	18000 U/l
POD	1000 U/l
4 aminoantipyrine	0.4 mmol/l
Phenol	11 mmol/l

R₂ : Standard 100 mg/dl.

PREPARATION OF WORKING REAGENT

The reagent R1 is ready to use.

If the absorbance of R1 is higher than 0.1 at 492 nm the reagent can not be used.

PROCEDURE

Wavelength	505 nm (492-550nm)
Temperature	25 °C/30°C/37°C
Cuvette	1 cm light path
Method	Endpoint - increasing

	Blank	Standard	Sample
Standard	-	10 µl	-
Sample	-	-	10 µl
Working reagent	1 ml	1 ml	1 ml

LINEARITY

Up to 500 mg/dL.

SPECIFICATION

Bilirubin 0.5g/l, lipid 10g/l and ascorbic acid 0.5g/l do not interfere with the assay up to the given levels

NOTES

- With this assay the determination of glucose concentration in urine is not acceptable, because ascorbic acid influences the measurement.
- These reagents may be used in several automatic analyzers, instruction for many of them are available on request.
- Incubation time may be reduced in many analyzers

PRESENTATION

2 X 120 ml	Cat No 1901	240 tests
4 X 120 ml	Cat No 1902	480 tests

BIBLIOGRAPHY

Trinder, P. Ann Clin Biochem. 6, 24, (1969).
 Digeon, B. Ann Biol Clin. 33,3,(1975).
 lott,J.A. Clin Chem, 21,1754. (1975)

The following symbols are used on labels



For in vitro diagnostic use



Use day (last day of the month)



Temperature limitation



Batch code



Code