

Glucose Test Kit

REF	Pack Size	Reagent 1	Reagent 2 (Std)
GLULMS01	5x100 ml	5x100 ml	1x2 ml
GLULMS02	2x500 ml	2x500 ml	1x2 ml
GLULMS03	4x50 ml	4x50 ml	1x2 ml

INTENDED USE

Glucose reagent is used for the quantitative determination of glucose concentration in human serum or plasma.

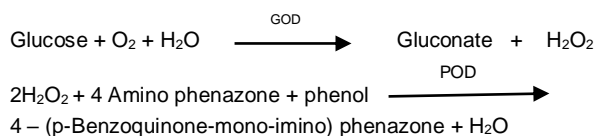
CLINICAL SIGNIFICANCE

Glucose is a major source of energy for most cells of the body; insulin facilitates glucose entry into the cells. Diabetes is a disease manifested by hyperglycemia; patients with diabetes demonstrate an inability to produce insulin. Clinical diagnosis should not be made on a single test result; it should integrate clinical and other laboratory data.

METHOD

Enzymatic End Point, Single reagent chemistry, GOD – POD Method

TEST PRINCIPLE



KIT CONTENTS/COMPONENTS

Reagent 1: Buffered Enzyme solution
Reagent 2: Standard Glucose (100 mg/dl)

Material Required but Not provided.

Laboratory instrumentation, spectrophotometer UV/VIS with thermostatic cuvette holder or clinical chemistry analyzer: semi-automated, calibrated micropipettes, glass or high-quality polystyrene cuvettes, test tubes/rack, heating bath, controls, saline.

SAFETY PRECAUTIONS AND WARNINGS

1. For in-vitro diagnostics use only.
2. Do not pipette by mouth. Avoid contact with skin and eyes. If spilt thoroughly wash affected area with water.
3. Do not use the reagent after the expiration date printed on the kit.

REAGENT PREPARATION, STORAGE AND STABILITY

Reagent is Ready to use keep away from direct light sources. Stability: up to expiration Date on labels at 2-8 °C.
Stability since first opening of bottle: preferable within 60 days at 2-8 °C.

REAGENT DETERIORATION

Discard the reagent if absorbance exceeds 0.3.

SPECIMEN

Use fresh serum and fresh plasma. The stability of glucose in specimen is reduced by bacterial contamination and by glycolysis. Serum/plasma is stable for 3 days 2-8°C. it is recommended to perform the assay with freshly collected samples.

PROGRAM AND PROCEDURE

Reaction Mode	End point
Wavelength	510 nm (500-560nm)
Light Path	10 mm
Blanking	Reagent blank
Reagent Volume	1000 µl
Standard Volume	10 µl
Sample Volume	10 µl
Incubation Temperature	15 min. at RT or 10 min. at 37°C.
Standard concentration	100 mg/dl
Linearity	500 mg/dl

PROCEDURE

Item	Blank	Standard	Sample
Reagent	1000 µl	1000 µl	1000 µl
Standard	-----	10 µl	-----
Sample	-----	-----	10 µl

Mix & incubate for 15 min. at room temp. or 10 minutes at 37°C. Read absorbance of standard and sample against reagent blank.

CALCULATION

$$\text{Conc. of Glucose} = \frac{\text{Abs sample}}{\text{Abs standard}} \times 100 \text{ (mg/dl) (Conc. Of Std.)}$$

NORMAL VALUES

Fasting Blood Glucose 70 – 110 mg/dl
Postprandial blood glucose < 145 mg/dl

Note: Expected range varies from population to population therefore each laboratory should establish its own normal range.

LIMITATIONS

If the value exceeds 500 mg/dl, dilute the sample with 0.9% saline solution rerun and result multiplied by dilution factor.

QUALITY CONTROL AND CALIBRATION

It is suggested to perform internal quality control with assayed normal and assayed abnormal, to confirm the validity of the test and assure the accuracy of patient result. Using the recommended calibrator or the Standard included, calibrate the assay.

WASTE DISPOSAL










This Product is made to be used in professional laboratories.

HIGHLIGHTS

1. Storage condition mentioned on the kit is to be used.
2. Before testing bring the reagents to the R.T.
3. Avoid reagents contamination.
4. Every time use new pipette-tips for pipetting out the reagents.
5. These Reagent kits meant for laboratory/professional use only, not for Drug use.

REFERENCE

Tinder P. Annals. Clin. Biochem 6,24(1969)
Young D.S. etal, Clinical Chemistry.21,1d(1975)
Lords Data File.

	Catalog No.		Contain Sufficient for test
	Batch No.		Instruction for use
	Manufacturing Date		In-vitro Diagnostics
	Expiry Date		Storage temperature
	Manufacturer		

IFU/GLU/01 Rev.: 02; Rev Dated.: 22/07/2024

