

GlucCell® Glucose Monitoring System

With the GlucCell® Glucose Monitoring System your glucose measurement during cell culture is faster and simplified. It is mainly designed for measuring the glucose metabolites during animal cell culture, but also fungal cell culture, while general diabetes glucose meter on the market are normally not suitable for these cell culture applications.

The GlucCell® System includes a portable, palm-size glucose meter and pre-calibrated, disposable test strips, specially designed for measuring the glucose concentration during mammalian cell and insect cell culture.

Principle:

GlucCell® Glucose Monitoring System is intended for use by laboratory researchers or bioreactor professionals to obtain a quantitative measurement of glucose in cell culture media. It is made to meet your needs: calibration and maintenance-free, fast, disposable, portable and with high accuracy. The measurement is based on the oxidation of glucose by glucose oxidase.

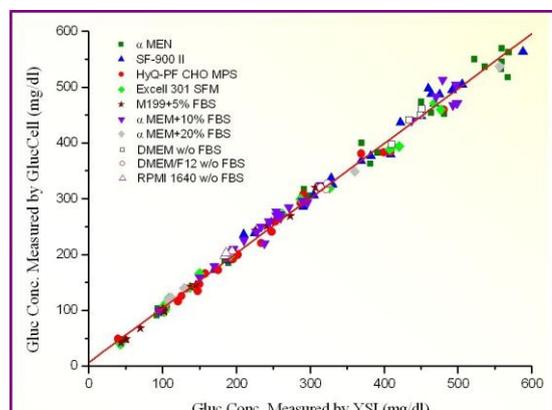
GlucCell® Features

- Suitable for both serum and serum-free culture medium in mammalian and insect cell culture
- Portable, pre-calibrated, ready-to-use, disposable
- 99,5 % correlated with NOVA and YSI biochemical analyzer
- Precision: >95 %, Accuracy >90 %, Linearity = 0.9997
- Direct measurement without requirement to separate cells from culture medium
- User-programmable measurement unit for mg/dl or mmol/l
- A drop of 1.5 µl turns out an instant result in just 15 seconds
- Zero risk of contamination on the device and to the environment



GlucCell® Specification

Assay Method	Electrochemical biosensor
Test Sample	Cell culture medium or equivalent solution
Test Result	Glucose concentration (mg/dl or mmol/l)
Sample Size	1.5 µl
Measure range	20 - 600 mg/dl (1.1 – 33.3 mmol/l)
Accurate range	30 - 500 mg/dl (1.67 - 27.78 mmol/l)
Test result time	Less than 15 seconds
Dimension	96 mm x 60 mm x 18.5 mm
Weight	70 g including battery
Power source	CR2032, 3V Lithium coin battery
Battery life	Approximately 1000 tests
Display	Large LCD
Memory	180 test results
Environment	10 - 40 °C, 20 % - 80 % relative humidity
Strip Size	45 mm x 6 mm x 0.6 mm



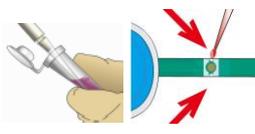
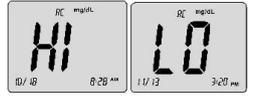
Glucose measurement with various kinds of culture medium in GlucCell obtains 99,5% correlation with YSI bioanalyzer

Perform a Glucose Test

I. Code the glucose meter (required only for a new lot of test strips)

	Insert the test strip into the strip slot, the meter will activate. The last code number will appear on the screen.
	Compare the code number shown on the meter display against the code number on the test strip vial. If the two numbers match, you may begin testing. Otherwise continue to the next step.
	Press S button until you hear the sound of buzzer and the code value flashes, press S or M button to obtain the code number indicated on the new test strip vial.
	Upon obtaining the right code number, wait for the new setting to flash 3 times to validate the change. The new code number is displayed on the screen.
	After screen shows the proper code and a blinking drop symbol shows up, your meter is ready to perform a test

II. Perform an Actual Glucose Test

	Insert test strip into strip slot as illustrated. The meter turns on automatically. The last code number will appear on the screen.
	Check that the code number in the meter matches the code on the vial. If the two numbers match you may begin testing. Otherwise refer to above section to code your meter first.
	When the drop symbol flashes, you are ready to perform a test.
	Use a pipette tip to withdraw approx. 1.5 µl test sample. Carefully press to form a droplet on the pipette tip. Bring the droplet underneath the right or left aperture of the testing strip and touch gently to the strip, allowing the entire droplet to be wicked into the strip. Please allow the sample to be absorbed naturally to fill up the confirmation window. Make sure that the sample has saturated the test confirmation window. Never push test sample over the aperture and cause overloading of the sample.
	When sample is applied to the strip, a line moves on the screen until measurement is completed.
	Test result will show up in 15 seconds.
	After test is completed, remove the strip from meter, and discard the used strip safely.
	The testing range of the meter is from 20 to 600 mg/dl (1.1 to 33.3 mmol/l). The accurate testing range is from 30 to 500 mg/dl (1.67 to 27.78 mmol/l). If HI is displayed, your cell culture glucose result may be higher than 600 mg/l (33.3 mmol/L). If LO is displayed, your cell culture glucose result may be lower than 20 mg/dl (1.1 mmol/L).

Order information:

Cat. No.	Description	Case Qty.
GC001000	GlucCell® Glucose Monitoring Kit: Includes Glucose Meter, Glucose Test Strips (2 boxes with 25 strips each), Check Key, Case, CD Manual, and Quick Reference Sheet	1
GC001001	Glucose Test Strips: 2 boxes with 25 strips each	1