

## Product datasheet

# Glucose Assay Kit - reducing agent compatible ab102517

[3 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Glucose Assay Kit - reducing agent compatible
<b>Detection method</b>	Colorimetric
<b>Sample type</b>	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
<b>Assay type</b>	Quantitative
<b>Sensitivity</b>	> 0.02 mM
<b>Range</b>	0.02 mM - 10 mM
<b>Assay time</b>	0h 30m
<b>Product overview</b>	<p>Glucose Assay Kit ab102517 provides direct measurement of glucose in biological samples. It is particularly suitable for serum and urine samples since it is unaffected by reducing substances, which can interfere with detection in oxidase-based kits.</p> <p>In the glucose assay protocol, glucose is specifically oxidized to generate a product which reacts with a dye to generate color (<math>\lambda = 450 \text{ nm}</math>) whose intensity is proportional to glucose concentration.</p> <p>The method is rapid, simple, sensitive, and suitable for high throughput. The assay is also suitable for monitoring glucose level during fermentation and glucose feeding in protein expression processes.</p> <p>The kit can detect glucose concentrations in the range of 20<math>\mu</math>M-10mM.</p> <p>Glucose assay protocol summary:</p> <ul style="list-style-type: none"><li>- add reaction mix to sample and standard wells</li><li>- incubate for 30 min</li><li>- analyze with a microplate reader</li></ul>
<b>Notes</b>	Previously called Glucose Detection Kit II
<b>Platform</b>	Microplate reader

### Properties

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## Storage instructions

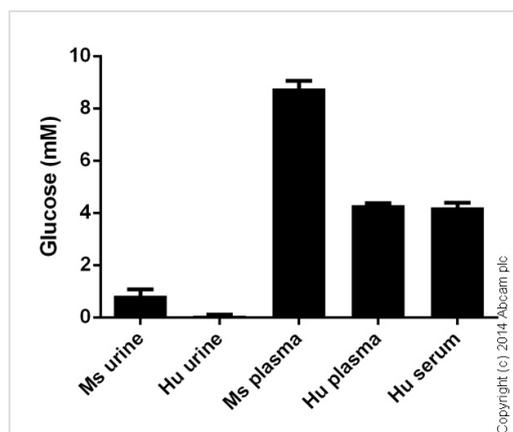
Store at -20°C. Please refer to protocols.

Components	Identifier	100 tests
Glucose Assay Buffer	WM	1 x 25ml
Glucose Enzyme Mix	Green	1 unit
Glucose Standard	Yellow	1 x 100µl
Glucose Substrate Mix	Red	1 unit

## Relevance

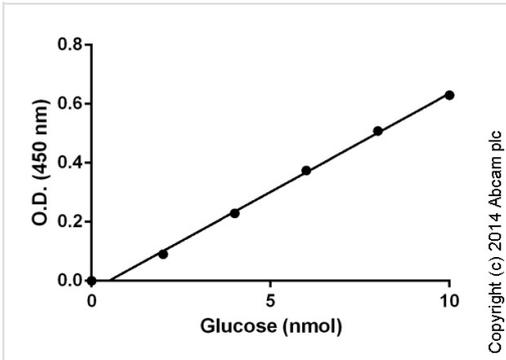
Glucose (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>; FW: 180.16) is a ubiquitous energy source in most organisms, from bacteria to humans. The breakdown of carbohydrates produces mono- and disaccharides, most of which is glucose. Through glycolysis and TCA (citric acid cycle), glucose is oxidized to eventually form CO<sub>2</sub> and water, generating the universal energy molecule ATP. Glucose is a primary source of energy for the brain and a critical component in the production of proteins and in lipid metabolism and therefore measurement of glucose level is a key diagnostic parameter for many metabolic disorders.

## Images



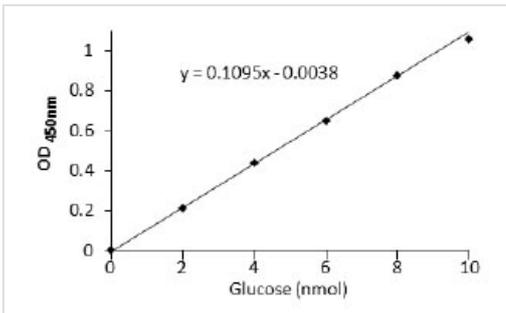
Glucose measured in biological fluids. Human samples diluted 20-80 fold. Mouse samples diluted 1-27 fold.

Functional Studies - Glucose Detection Kit  
(ab102517)



Standard curve: mean of duplicates (+/- SD) with background reads subtracted

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Standard curve for glucose run using the kit protocol

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