abcam

Product datasheet

Glucose Assay Kit - reducing agent compatible ab102517

38 References 3 Images

Overview

Product name	Glucose Assay Kit - reducing agent compatible
Detection method	Colorimetric
Sample type	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
Assay type	Quantitative
Sensitivity	> 0.02 mM
Range	0.02 mM - 10 mM
Assay time	0h 30m
Product overview	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. In the glucose assay protocol, glucose is specifically oxidized to generate a product which reacts with a dye to generate color (λ = 450 nm) whose intensity is proportional to glucose concentration. 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. The kit can detect glucose concentrations in the range of 20µM-10mM. Glucose assay protocol summary: - add reaction mix to sample and standard wells - incubate for 30 min - analyze with a microplate reader
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K686 Glucose Colorimetric Assay Kit II. K686-100 is the same size as the 100 test size of ab102517.
Platform	Microplate reader

Properties

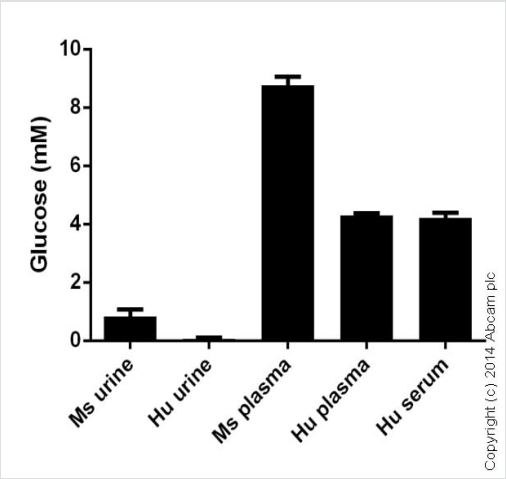
Storage instructions Store at -20°C. Please refer to protocols.

Components	100 tests
Assay Buffer XXXIV	1 x 25ml
Developer Solution III	1 unit
Development Enzyme Mix V	1 unit
Glucose Standard	1 x 100µl

Relevance

Glucose ($C_6H_{12}O_6$; 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_2 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

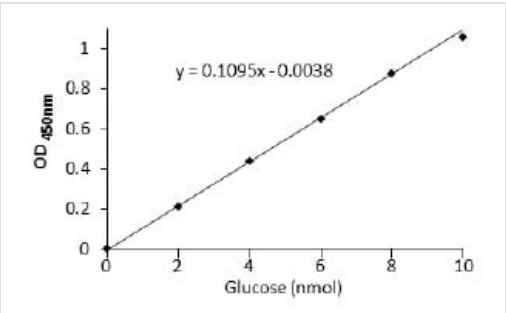


Functional Studies - Glucose Detection Kit (ab102517)

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



Functional Studies - Glucose Detection Kit (ab102517)

Standard curve for glucose run using the kit protocol

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