

Glucose Assay Kit

Glucose Assay Kit (Colorimetric)

CATALOG #
AAA11437

PRODUCT SYNONYMS

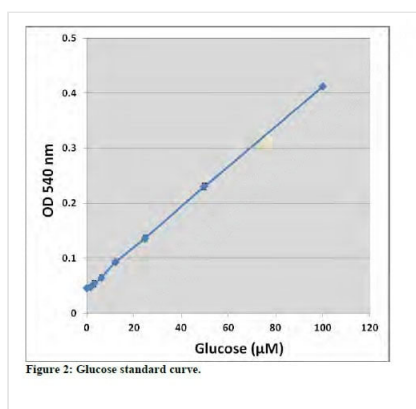
Glucose; Glucose Assay Kit (Colorimetric); Glucose assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Upon receipt, store the Glucose Standard, Colorimetric Probe, HRP, and Glucose Oxidase at -20 degree C
The Fluorescence Probe is light sensitive and must be stored accordingly
Avoid multiple freeze/thaw cycles
Store the 10X Assay Buffer at room temperature.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Glucose assay kit	Principle of the Assay: Total Glucose Assay Kit measures total glucose within food or biological samples. Glucose is oxidized by glucose oxidase into D-gluconic acid plus hydrogen peroxide. The hydrogen peroxide is then detected with a highly specific colorimetric probe. Horseradish peroxidase catalyzes the reaction between the probe and hydrogen peroxide, which bind in a 1:1 ratio. Samples are compared to a known concentration of glucose standard within the 96-well microtiter plate format. Samples and standards are incubated for 30-45 minutes and then read with a standard 96-well colorimetric plate reader (Figure 1). Background/Introduction: Glucose is a sugar used as an important source of energy in plants, prokaryotes and eukaryotes via processes such as respiration and fermentation. In plants, algae, and cyanobacteria, the energy of light is synthesized into the storage form of sugars such as glucose. More specifically, in a downstream process known as the Calvin cycle, carbon dioxide is incorporated into organic carbon compounds, like ribulose biphosphate. Using ATP and NADPH from upstream light-dependent reactions, the resulting compounds are then reduced and removed to form further carbohydrates, such as glucose. In animals, through the process of glycolysis followed by the citric acid cycle, glucose is broken down to water and CO2, resulting in energy from ATP formation. Glucose is often stored as a polymer such as glycogen. In humans, glucose is commonly measured in blood samples. Bloodstream levels of glucose are normally under tight regulation; however, high levels measured in fasting individuals may indicate prediabetes or diabetes. Glucose Assay Kit is a simple colorimetric assay that measures the amount of total glucose present in foods or biological samples in a 96-well microtiter plate format. Each kit provides sufficient reagents to perform up to 500 assays, including blanks, glucose standards and unknown samples. Sample glucose concentrations are determined by comparison with a known glucose standard. The kit has a detection sensitivity limit of 6.25 uM glucose.
Product Categories/Family for Glucose assay kit	Metabolism Research; Carbohydrate Metabolism; Glucose Assay Kit (Colorimetric)

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/glucose/11437>