

Glucose Measurement Kit

Glucose Measurement Kit

1 kit [G0656]

This product allows to measure the glucose concentration present in an aqueous sample. Glucose is an important source of energy for living organisms, and is frequently used not only as an indicator of glucose metabolism in sugar and lipid research, but also as an indicator of intracellular metabolism in cancer research. The reaction of glucose oxidase with glucose generates hydrogen peroxide, which is then used to indirectly calculate glucose concentration.

Kit Components

- Glucose Measurement Solution 2 vials
- Glucose Standard Solution (500 mg/dL) 2 vials

Volume

- Enough for 200 tests (100 tests x2)

Advantages

- Allows the measurement of glucose concentrations down to as little as 50 mg/dL and up to 500 mg/dL.
- Contains two batches of reagents for the assay of 100 samples per batch.
- Makes it possible to measure glucose concentrations in blood and cell culture supernatants.
- Determines the glucose concentration by measuring absorbance at 542 nm.

Application: Determination of Glucose Concentration in Bovine Serum Using G0656

1. Dilute Glucose Standard Solution (500 mg/dL) with deionized water to prepare a 2-fold dilution series of glucose (100 μ L each).
2. Transfer 2 μ L of each glucose dilution series solution into a 96-well plate. Additionally transfer 2 μ L of bovine serum sample as a sample into same 96-well plate.
3. Add 200 μ L of Glucose Measurement Solution to each well and incubated plate at room temperature for 20 minutes.
4. After 20 minutes, measure the absorbance at 540 (10) nm.
5. Create a calibration curve from the glucose dilution series data and use it to calculate the concentration of glucose in the bovine serum.

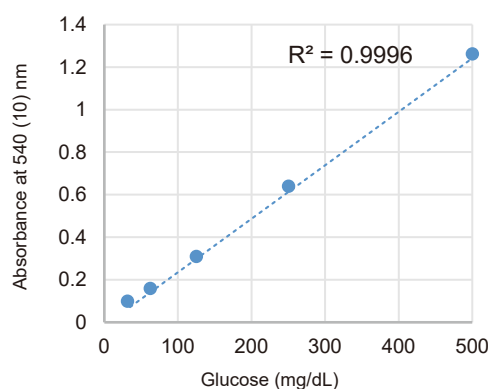


Figure. Glucose concentrations and absorbance

The Absorbance of bovine serum at 540 nm was determined to be 0.1717. After comparison with the standard curve, the corresponding glucose concentration was found to be 60.65 mg/dL = 606.5 mg/L.

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