

Glucose Uptake Colorimetric Assay Kit

Product Information

Cat

Kit-2249

Cat.No.

Kit-2249

Product Overview

Glucose uptake is an important biological process for studying cell signaling and glucose metabolism. Among many different methods available for measuring glucose uptake, 2-deoxyglucose (2-DG) has been widely used because of its structural similarity to glucose. As with glucose, 2-DG can be taken up by glucose transporters and metabolized to 2-DG-6-phosphate (2-DG6P). 2-DG6P, however, cannot be further metabolized, and thus accumulates in the cells. The accumulated 2-DG6P is directly proportional to 2-DG (or glucose) uptake by cells. In glucose uptake colorimetric assay kit, the 2-DG6P is oxidized to generate NADPH, which can be determined by an enzymatic recycling amplification reaction. This easy to use non-radioactive kit is highly sensitive and can detect glucose uptake as low as 10 pmol/well.

Applications

This easy to use non-radioactive kit is highly sensitive and can detect glucose uptake as low as 10 pmol/well.

Storage

-20°C

Shipping

Gel Pack

Size

100 assays

Kit Components

Extraction Buffer; Neutralization Buffer; 2-Deoxyglucose (2-DG, 10 mM); Assay Buffer; Enzyme Mix

Glucose Uptake Colorimetric Assay Kit

(lyophilized); Recycling Mix (lyophilized); 2-DG6P Standard (lyophilized); Glutathione Reductase (lyophilized); Substrate-DTNB (lyophilized)

Target Species

Mammalian

Detection method Absorbance (412 nm)

Features & Benefits

Simple procedure;

Fast and convenient;

The assay is easy, non-radioactive, and highly sensitive
