



Glucose Uptake Fluorometric Assay Kit

Product Information

Cat

Kit-2250

Cat.No.

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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, therefore, directly proportional to 2-DG (or glucose) uptake by cells. In glucose uptake fluorometric assay kit, the accumulated 2-DG6P is enzymatically oxidized and coupled to PicoProbe, which generates fluorescence in the presence of NADPH. This easy to use non-radioactive kit can detect glucose uptake as low as 50 pmol/well and can be used for a variety of cell types.

Applications

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Storage

-20°C

Shipping

Gel Pack

Size

100 assays

Kit Components



Glucose Uptake Fluorometric Assay Kit

Extraction Buffer; Neutralization Buffer; 2-Deoxyglucose (2-DG, 10 mM); 2-DG Uptake Assay Buffer; Enzyme Mix (Lyophilized); (in DMSO); 2-DG6P Standard (Lyophilized)

Target Species

Mammalian

Detection method Fluorescence(Ex/Em = 535/587 nm)

Features & Benefits

Simple procedure;

Fast and convenient;

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