

Hexokinase Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1090

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Description

Hexokinase (EC 1.1.1.49; also called HK, 6-Phosphate Glucose Kinase, ATP: D-Hexose 6-Phosphotransferase, ATP-dependent Hexokinase) is found in many organisms including bacteria, plants and mammals. Hexokinases play an important role in glucose metabolism. There are four isoforms (HK-I, II, III and IV). HK-I, HK-II, and HK-III have low Km, while HK-IV (also called Glucokinase) has 100-fold high Km for glucose. Hexokinase deficiency leads to diseases such as X-linked muscular dystrophy and rare autosomal recessive hemolytic anemia. On the other hand, increased hexokinase activity is detected in various human tumors and is associated with metastasis. Hexokinase Activity Assay kit provides a quick and easy method for monitoring HK activity in a wide variety of samples. In this assay, HK converts glucose into glucose-6-Phosphate, which in turn undergoes a series of reactions and reduce to generate intense fluorescent product (Ex/Em = 535/587 nm). The assay is simple, sensitive and high-throughput adaptable and can detect as low as 2 μ U of HK activity.

Applications

Measurement of Hexokinase activity in various tissues/cells.

Analysis of Glucose metabolism and Cell signaling in various cell types.

Screening anti-diabetic drugs.

Storage

-20°C

Shipping

Gel Pack

Hexokinase Activity Assay Kit (Fluorometric)

Size

100 assays

Kit Components

HK Assay Buffer;(in DMSO); HK Substrate;ATP; HK Enzyme; HK Developer; HK Positive Control; NADPH Standard (200 nmol)

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

Features & Benefits

Simple and rapid procedure;

Highly Sensitive;

Can detect hexokinase activity even as low as 2 μ U