# abcam

## Product datasheet

# Hexokinase Activity Assay Kit (Fluorometric) ab211103

1 References 3 图像

#### 概述

产品名称 Hexokinase Activity Assay试剂盒(Fluorometric)

检**测方法** Fluorescent

样品类型Cell Lysate, Tissue Lysate检测类型Enzyme activity (quantitative)

**灵敏度** 2 μU

种属反应性 与反应: Mammals, Other species

产品概述 The Hexokinase Activity Assay Kit (Fluorometric) (ab211103) provides a simple, sensitive and

quick method for monitoring hexokinase (HK) activity in cells, serum, and animal or plant tissues. In this assay, HK converts glucose into glucose-6-phosphate, which in turn undergoes a series of reactions and reduces the sensitive probe to generate an intense fluorescent product that can be

easily detected at Ex/Em = 535/587 nm.

This assay can detect as low as 2 µU of HK activity.

说明 This product is manufactured by BioVision, an Abcam company and was previously called K769

PicoProbe™ Hexokinase Activity Assay Kit (Fluorometric). K769-100 is the same size as the

100 test size of ab211103.

Hexokinase (HK, 6-Phosphate glucose kinase, ATP:D-Hexose 6- Phosphotransferase, ATP-dependent hexokinase, EC 1.1.1.49) is responsible for phosphorylating hexoses (six-carbon

sugars) to form hexose phosphate. Hexokinases play an important role in glucose metabolism, as glucose is the most important substrate of hexokinases. Hexokinases are found in many organisms including bacteria, plants and mammals. In mammals, there are four isoforms (HK-I, II, III) and IV). HK-I, HK-II, and HK-III are referred as "low Km" because of their high affinity for glucose

(Km < 1mM), while HK-IV (also known as Glucokinase) has a Km for glucose 100-fold higher and

can only phosphorylate glucose when the substrate concentration is high enough.

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.

**平台** Microplate reader

性能

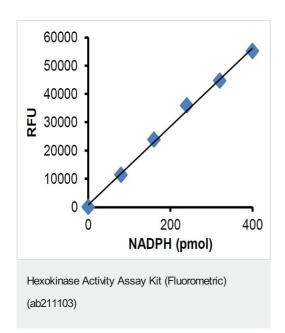
1

## 存放说明

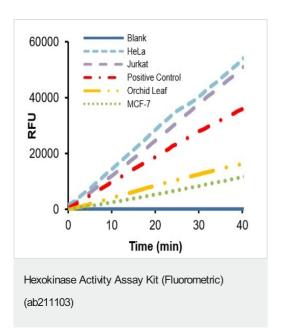
Store at -20°C. Please refer to protocols.

组件	100 tests
Assay Buffer LX	1 x 25ml
ATP II	1 vial
Developer IX	1 vial
Development Enzyme Mix IX	1 vial
HK Positive Control	1 vial
HK Substrate	1 x 1ml
NADPH Standard	1 vial
PicoProbe I	1 x 400µl

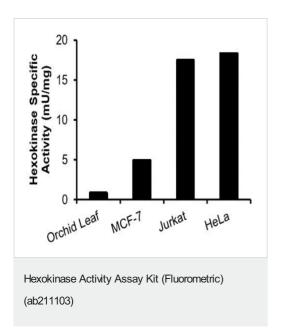
# 图片



Typical NADPH standard calibration curve.



Kinetic curves showing Hexokinase activity in positive control (included in kit), lysates from HeLa (0.62  $\mu$ g), Jurkat (0.65  $\mu$ g) and MCF-7 cells (0.56  $\mu$ g), and lysates from orchid leaf (4  $\mu$ g).



Hexokinase specific activity in lysates from orchid leaf (4  $\mu$ g), MCF-7 (0.56  $\mu$ g), Jurkat (0.65  $\mu$ g) and HeLa cells (0.62  $\mu$ g).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors