# abcam

## Product datasheet

## Hexokinase Inhibitor Assay Kit (Colorimetric) ab211107

1 References 1 图像

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说明

产品名称 Hexokinase抑制剂Assay 试剂盒(Colorimetric)

检**测方法** Colorimetric

样品类型 Inhibitor compounds 检测类型 Semi-quantitative

**检测时间** 0h 30m

产品概述 Hexokinase Inhibitor Screening Kit (Colorimetric) (ab211107) provides a rapid, simple and

adaptable test for high-throughput screening of Hexokinase inhibitors within 30 minutes. Glucose is converted to glucose-6-phosphate by hexokinase; the glucose-6-phosphate is oxidized by glucose-6-phosphate dehydrogenase to form NADH, which reduces a colorless probe to a colored product with strong absorbance at OD = 450 nm. In the presence of a Hexokinase inhibitor, the reaction is impeded/abolished resulting in decrease or total loss of absorbance.

This simple and high-throughput adaptable assay kit can be used to screen, study or characterize

potential inhibitors of Hexokinase.

This product is manufactured by BioVision, an Abcam company and was previously called K828 Hexokinase (HK) Inhibitor Screening Kit (Colorimetric). K828-100 is the same size as the 100

test size of ab211107.

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

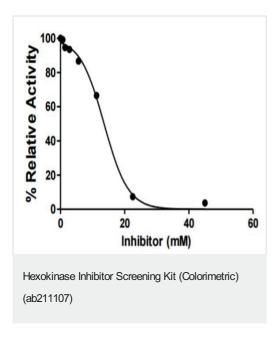
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#### 存放说明

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

组件	100 tests
HK Assay Buffer	1 x 25ml
Hexokinase (0.5 U)	1 vial
HK Coenzyme (25 mg)	1 vial
HK Converter (10 U)	1 vial
HK Developer (30 mg)	1 vial
HK Inhibitor Control (40 μmole)	1 vial
HK Substrate	1 x 1ml

## 图片



Typical inhibition curve of Hexokinase activity by Hexokinase Inhibitor (Bromopyruvic Acid). Assay was performed following the kit protocol.

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

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