

# Hexokinase Activity Assay Kit (Colorimetric) ab136957

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## 概述

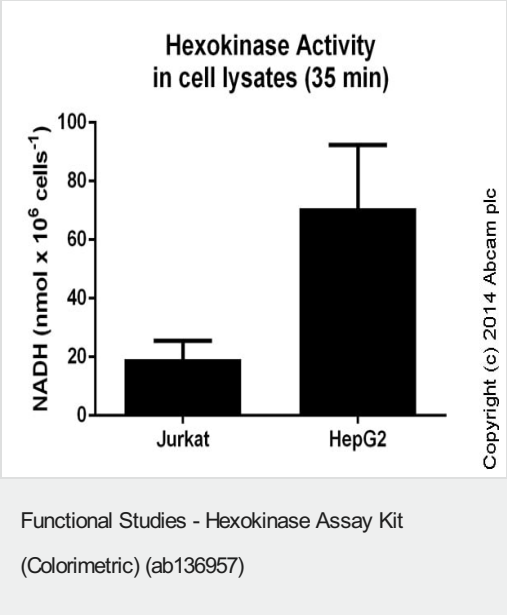
|       |   |
|-------|---|
| 产品名称  | Hexokinase Activity Assay试剂盒(Colorimetric)  |
| 检测方法  | Colorimetric  |
| 样品类型  | Serum, Tissue, Adherent cells, Suspension cells, Tissue Extracts  |
| 检测类型  | Enzyme activity (quantitative)  |
| 灵敏度   | < 0.1 mU/well   |
| 检测时间  | 1h 00m  |
| 种属反应性 | 与反应: Mammals, Other species   |
| 产品概述  | <p>Hexokinase Activity Assay Kit (ab136957) uses a simple, sensitive and rapid procedure which can detect hexokinase activity to below 0.1 mU/well.</p> <p>In the hexokinase assay protocol, glucose is converted to glucose-6-phosphate by hexokinase. The glucose-6-phosphate is then oxidized by glucose-6-phosphate dehydrogenase to form NADH. The NADH reduces a colorless probe to a colored product with strong absorbance at 450 nm.</p> <p>Hexokinase activity assay protocol summary:</p> <ul style="list-style-type: none"> <li>- add samples and standards to wells</li> <li>- add reaction mix and incubate for 20-60 min</li> <li>- analyze repeatedly with a microplate reader during the incubation</li> </ul> |
| 说明    | <p>This product is manufactured by BioVision, an Abcam company and was previously called K789 Hexokinase Colorimetric Assay Kit. K789-100 is the same size as the 100 test size of ab136957.</p> <p>Hexokinases (HK) are found in many organisms including bacteria, plants and mammals and play an important role in glucose metabolism. Hexokinases phosphorylate glucose and generate glucose-6-phosphate for glycolysis. Hexokinases have four isoforms (HK-I, II, III and IV). HK-I, HK-II and HK-III have low Km, while HK-IV has 100 fold high Km.</p>   |
| 平台    | Microplate reader   |

## 性能

**存放说明**      Store at -20°C. Please refer to protocols.

| 组件                          | 100 tests |
|-----------------------------|-----------|
| Assay Buffer LX             | 1 x 25ml  |
| Developer Solution III      | 1 vial    |
| Development Enzyme Mix IX   | 1 vial    |
| Hexokinase Positive Control | 1 vial    |
| HK Coenzyme                 | 1 vial    |
| HK Substrate                | 1 x 1ml   |
| NADH Standard I             | 1 vial    |

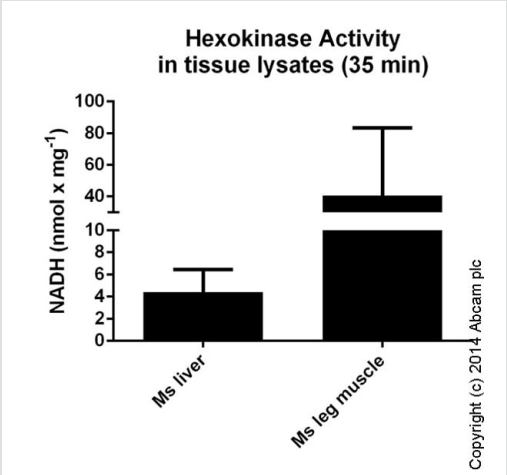
图片



Hexokinase Activity measured in cell lysates showing quantity (nmol) per 1 mln cells after 35 min of incubation.

Samples with the concentration of 5e6 cells/mL were used.

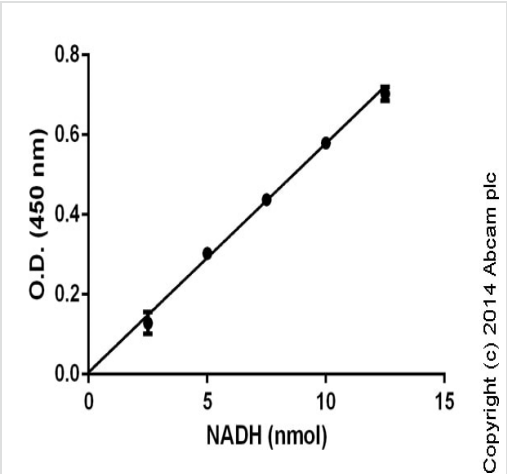
Samples were diluted 1-27 fold.



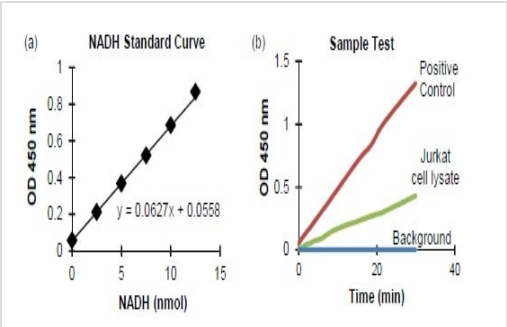
Functional Studies - Hexokinase Assay Kit  
(Colorimetric) (ab136957)

Hexokinase Activity measured in tissue lysates showing quantity (nmol) per mg of extracted protein after 35 min of incubation.

Protein concentration for samples varied from 13 mg/mL to 43 mg/mL. Samples were diluted 1-9 fold.

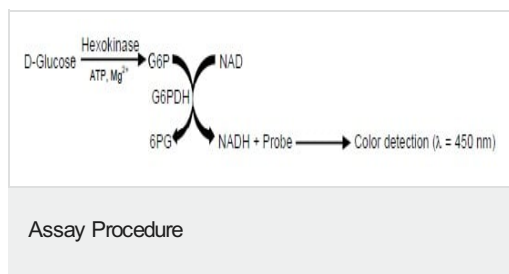


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Example data

NADH standard curve (a). Hexokinase activity in Positive Control and Jurkat cell lysate (40 µg) (b).



In this kit 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 450 nm.

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

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