

## General Hexokinase Assay Kit

Hexokinase Microplate Assay Kit

|                               |                              |                                         |
|-------------------------------|------------------------------|-----------------------------------------|
| CATALOG #<br><b>AAA261583</b> | REACTIVITY<br><b>General</b> | APPLICATIONS<br><b>Functional Assay</b> |
|-------------------------------|------------------------------|-----------------------------------------|

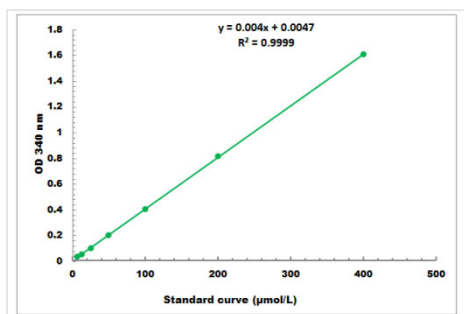
### PRODUCT SYNONYMS

Hexokinase; Hexokinase Microplate Assay Kit; EC 2.7.1.1; Hexokinase type I; Hexokinase type II; Hexokinase type III; Hexokinase type IV (glucokinase); Hexokinase assay kit

### PRODUCT SPECIFICATIONS

|                                                  |                                                                                                            |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Reactivity                                       | General                                                                                                    |
| Samples                                          | Urine, Serum, Plasma, Tissue extracts, Cell lysate, Cell culture media and Other biological fluids Samples |
| Detection Range                                  | 4 umol/L - 400 umol/L                                                                                      |
| Applicable Applications for Hexokinase assay kit | FA (Functional Assay)                                                                                      |
| Preparation and Storage                          | Shipped and store at 4 degree C for 6 months.                                                              |

### IMAGES



Standard Curve (Sample)

### ADDITIONAL INFORMATION

#### Related Product Information for Hexokinase assay kit

Background: Hexokinases, which catalyze the ATP-dependent phosphorylation of aldo- and keto-hexoses to hexose-6-phosphate, catalyze the first step in a number of important biochemical pathways. In mammalian tissues, glucose is the predominant substrate for the hexokinases. There are four isozymes of hexokinase in mammalian tissue, (HK-I, -II, -III, and -IV), which differ in their kinetic and regulatory properties as well as tissue distribution and cofactor use. The hexokinases catalyze the first step in most of the relevant glucose metabolism pathways. Alterations in hexokinase activity are associated with multiple disorders such as X-linked muscular dystrophy, hemolytic anemias, and cancer. Hexokinase Microplate Assay Kit provides a simple and direct procedure for measuring hexokinase activity in a variety of samples. Hexokinase activity is determined by a coupled enzyme assay, in which glucose is converted to glucose-6-phosphate by hexokinase, which is oxidized by glucose-6-phosphate dehydrogenase to form NADPH. The resulting NADPH reduces a colorless probe resulting in a colorimetric (340 nm) product proportional to the hexokinase activity present.

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

