

Phosphoglycerate Kinase Activity Assay Kit (Colorimetric) ab252890

[2 References](#) [3 Images](#)

Overview

Product name	Phosphoglycerate Kinase Activity Assay Kit (Colorimetric)
Detection method	Colorimetric
Sample type	Tissue, Adherent cells, Suspension cells
Sensitivity	50 mU/well
Assay duration	Multiple steps standard assay
Product overview	Phosphoglycerate Kinase Activity Assay Kit (Colorimetric) ab252890 provides a quick and easy way for monitoring PGK activity in various samples. In the first step of this enzymatic assay, PGK converts 3-Phosphoglycerate and ATP to 1,3-Bisphosphoglycerate and ADP. The nascent intermediate is detected via a series of enzymatic reactions that lead the oxidation of NADH to NAD, which can be easily detected (OD= 340 nm). The assay is simple, sensitive and can detect Phosphoglycerate Kinase Activity lower than 50 mU in variety of samples.
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K194 Phosphoglycerate Kinase Activity Assay Kit (Colorimetric). K194-100 is the same size as the 100 test size of ab252890.
Tested applications	Suitable for: Functional Studies
Platform	Microplate (12 x 8 well strips)

Properties

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

Components	100 tests
3-Phosphoglycerate	1 vial
96-Well UV Transparent Plate	1 unit
Assay Buffer IV	1 x 25ml
ATP III	2 vials

Components	100 tests
NADH I	1 vial
PGK Developer	1 vial
PGK Positive Control	1 vial

Function In addition to its role as a glycolytic enzyme, it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein).

Pathway Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 2/5.

Involvement in disease Defects in PGK1 are the cause of phosphoglycerate kinase 1 deficiency (PGK1D) [MIM:300653]. It is a condition with a highly variable clinical phenotype that includes hemolytic anemia, rhabdomyolysis, myopathy and neurologic involvement. Patients can express one or more of these manifestations.

Sequence similarities Belongs to the phosphoglycerate kinase family.

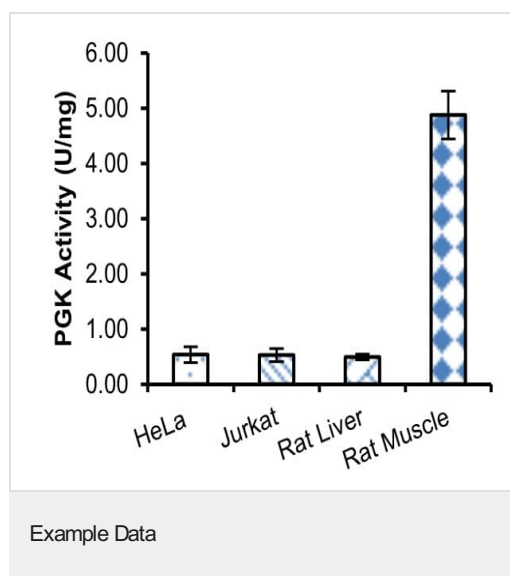
Cellular localization Cytoplasm.

Applications

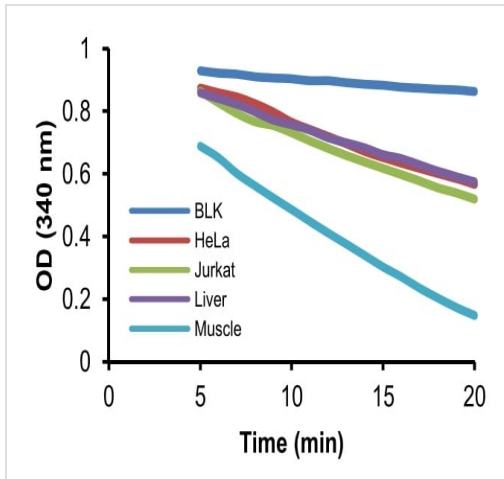
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab252890 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images

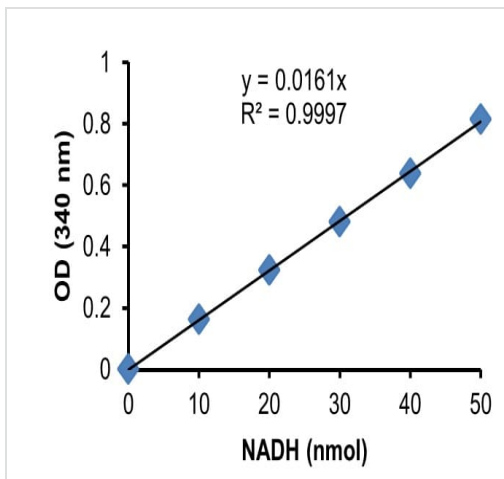


Relative PGK Activity was calculated in lysates prepared from rat liver (2 µg), rat muscle (0.5 µg), HeLa (Human epithelial cell line from cervix adenocarcinoma) (1.5 µg) and Jurkat (Human T cell leukemia cell line from peripheral blood) (1.5 µg).



Kinetic measurement of Phosphoglycerate Kinase activity from various samples.

Example Data



NADH standard curve.

Example Data

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

Our Abpromise to you: Quality guaranteed and expert technical support

- 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 <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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