

Product datasheet

Phosphoglucomutase Activity Assay Kit (Colorimetric) ab155896

2 References [画像数 6](#)

製品の概要

製品名	Phosphoglucomutase Activity Assay Kit (Colorimetric)
検出方法	Colorimetric
サンプルの種類	Plasma, Tissue, Adherent cells, Suspension cells, Tissue Homogenate
アッセイタイプ	Enzyme activity
検出感度	< 1 mU/well
検出範囲	2.5 nmol/well - 12.5 nmol/well
種交差性	交差種: Mammals, Other species
製品の概要	In Abcam's Phosphoglucomutase Activity Assay Kit (Colorimetric) (ab155896), PGM (phosphoglucomutase) converts glucose-1-phosphate to glucose-6-phosphate; 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. The Phosphoglucomutase Assay Kit is simple, sensitive and rapid and can detect PGM activity even less than 1 mU/reaction.

特記事項

This product is manufactured by BioVision, an Abcam company and was previously called K774 Phosphoglucomutase Colorimetric Assay Kit. K774-100 is the same size as the 100 test size of ab155896.

Phosphoglucomutase (PGM) plays a key role in carbohydrate metabolism and widely exists in all organisms. PGM interconverts Glucose- 1-Phosphate (G1P) and Glucose-6-Phosphate (G6P) depending on the body requirement. When glycogen breaks down, G1P is generated and phosphoglucomutase converts G1P to G6P, which can go either to glycolytic pathway to generate ATP, or to pentose phosphate pathway to generate ribose and NADPH. On the other hand, when cells have extra energy, PGM converts G6P to G1P, which generates glycogen. In humans, phosphoglucomutase have 2 isoforms (PGM I and PGM II). PGM deficiency leads to glucose storage disease. Detection of abnormal phosphoglucomutase activity is crucial for diagnosis, prediction and treatment of the disease.

試験プラットフォーム

Microplate reader

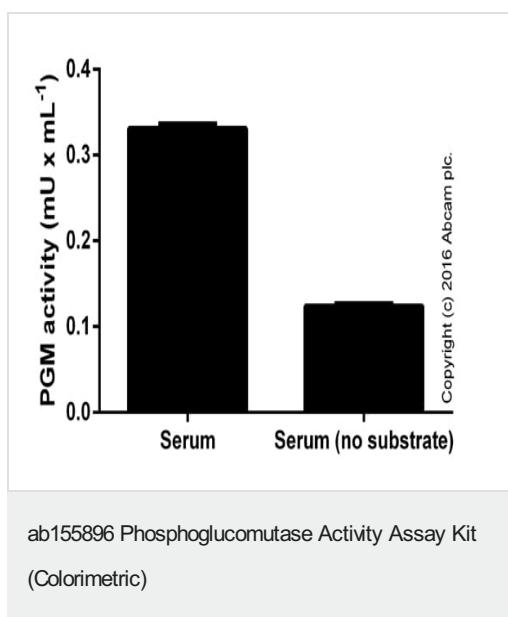
製品の特性

保存方法

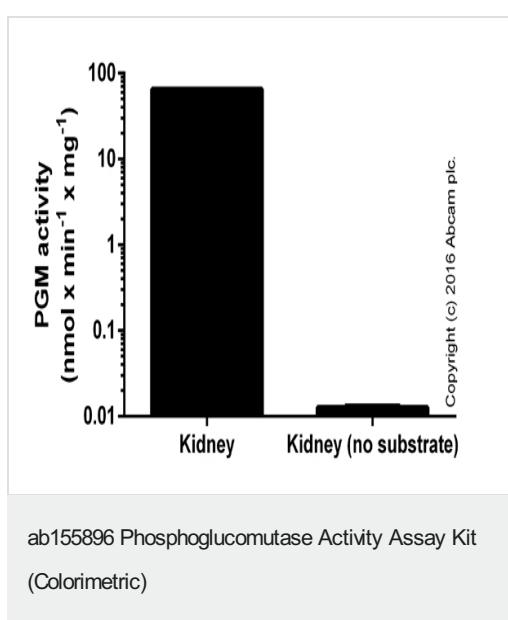
Store at -20°C. Please refer to protocols.

内容	100 tests
NADH Standard	1 vial
PGM Assay Buffer	1 x 27ml
PGM Developer	1 vial
PGM Enzyme Mix	1 vial
PGM Positive Control	1 vial
PGM Substrate	1 vial

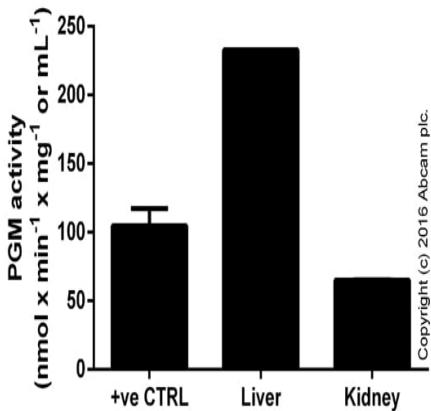
画像



Quantity of phosphoglucomutase in mouse serum. To control for background signal in samples, substrate was excluded in the control. Measurements from samples (diluted 2 times) were taken after 10 and 20 minutes, the increase in signal was used to calculate the activity (duplicates; \pm SD).

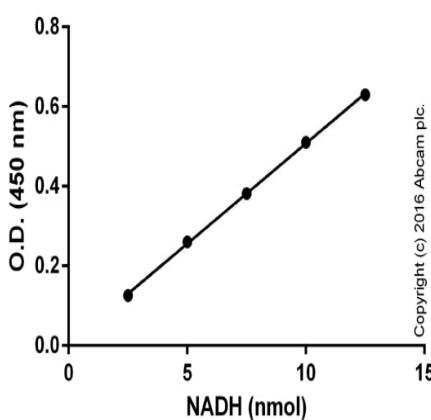


Quantity of phosphoglucomutase in mouse kidney lysates, without prior ammonium sulfate precipitation. To control for background signal in samples, substrate was excluded in the control. The samples were tested in a range of different dilutions. Data shown is from 5 microgram kidney proteins. Measurements were taken after 10 and 20 minutes, the increase in signal was used to calculate the activity (duplicates; \pm SD).



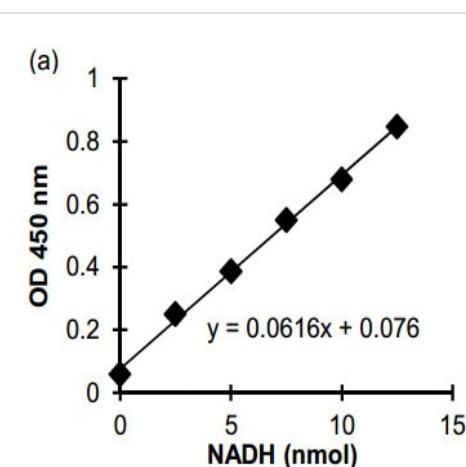
Quantity of phosphoglucomutase in positive control and mouse liver and kidney lysates (without prior ammonium sulfate precipitation). The samples were tested in a range of different dilutions. Data shown is from 1 microgram of liver proteins (in 50 uL) and 5 microgram of kidney proteins. Measurements were taken after 10 and 20 minutes, the increase in signal was used to calculate the activity after correction for the sample input (duplicates; +/- SD).

ab155896 Phosphoglucomutase Activity Assay Kit
(Colorimetric)



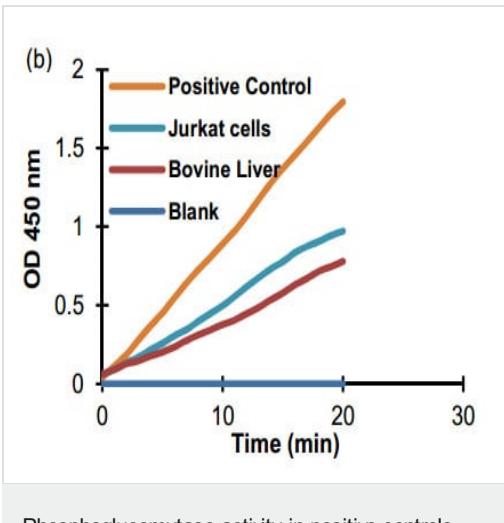
Standard curve with background signal subtracted (duplicates; +/- SD).

ab155896 Phosphoglucomutase Activity Assay Kit
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NADH standard curve produced using kit protocol.

NADH Standard Curve



Phosphoglucomutase activity in pure PGM Positive Control, jurkat cell lysate (induced with 2 µM camptothecin) and bovine liver lysate respectively

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