abcam

Product datasheet

Glucose 6 Phosphate Dehydrogenase Assay Kit (Colorimetric) ab102529

★★★★★ 1 Abreviews 20 References 画像数 8

製品の概要

製品名 Glucose 6 Phosphate Dehydrogenase Assay Kit (Colorimetric)

検出方法 Colorimetric

サンプルの種類 Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts

アッセイタイプEnzyme activity検出感度> 0.04 mU/well

全工程の試験時間 1h 00m

製品の概要 Glucose 6 Phosphate Dehydrogenase Assay Kit (Colorimetric) (ab102529) is a simple, sensitive

and rapid assay detects the activity of Glucose 6 Phosphate Dehydrogenase (G6PDH or G6PD)

in a variety of samples.

In the G6PD assay protocol, glucose 6 phosphate is oxidized, which leads to the conversion of a

nearly colorless probe to an intensely colored product with an absorbance at 450nm.

The G6PD assay kit can detect as low as 0.04mU G6PD per well.

G6PD assay protocol summary:

- add samples and positive control to wells

- add reaction mix

- analyze on a microplate reader for 5-30 min

特記事項 This product is manufactured by BioVision, an Abcam company and was previously called K757

Glucose-6-Phosphate Dehydrogenase Activity Colorimetric Assay Kit. K757-100 is the same

size as the 100 test size of ab102529.

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.

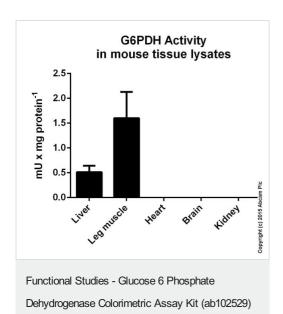
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内容	100 tests
Assay Buffer V	1 x 25ml
Developer Solution III	1 vial
Development Enzyme Mix IX	1 vial
G6PDH Substrate	1 vial
NADH Standard I	1 vial

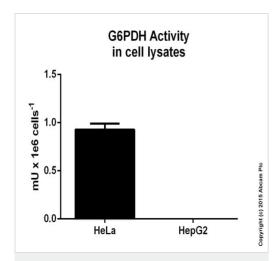
関連性

Glucose 6 phosphate dehydrogenase (G6PDH) is a cytosolic enzyme in the pentose phosphate pathway, a metabolic pathway that supplies reducing energy to cells (such as erythrocytes) by maintaining the level of the co-enzyme nicotinamide adenine dinucleotide phosphate (NADPH). The NADPH in turn maintains the level of glutathione in these cells that helps protect the red blood cells against oxidative damage. Of greater quantitative importance is the production of NADPH for tissues actively engaged in biosynthesis of fatty acids and/or isoprenoids, such as the liver, mammary glands, adipose tissue, and the adrenal glands.

画像



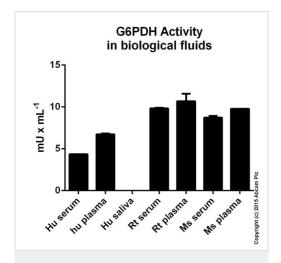
G6PDH Activity measured in mouse tissue lysates. Protein concentration for samples varied from 7 mg/mL to 17 mg/mL. Samples were diluted 1-3 fold.



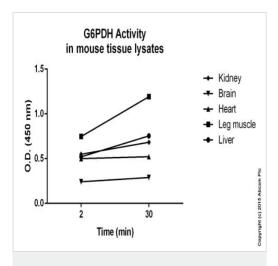
Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529)



Samples with the concentration of 4e6 cells/mL were used. Samples were undiluted.

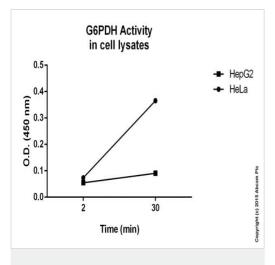


Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529) $\label{eq:GPDHActivity} \ \ \text{measured in biological fluids. Samples were undiluted}.$



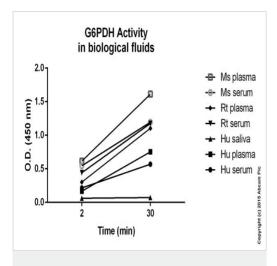
G6PDH Activity measured in mouse tissue lysates. Protein concentration for samples varied from 7 mg/mL to 17 mg/mL. Samples were undiluted.

Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529)



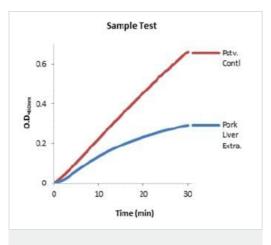
Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529) G6PDH Activity measured in cell lysates.

Samples with the concentration of 4e6 cells/mL were used. Samples were undiluted.



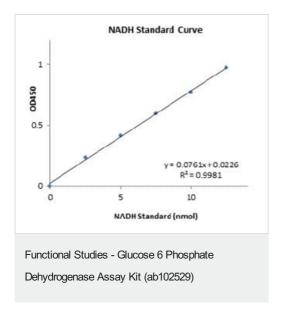
G6PDH Activity measured in biological fluids. Samples undiluted.

Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529)



Example of positive control and pork liver samples test curves obtained using ab102529

Functional Studies - Glucose 6 Phosphate Dehydrogenase Colorimetric Assay Kit (ab102529)



Example of Standard curve obtained using ab102529

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