

## Product datasheet

# Glucose-6-Phosphate Assay Kit - High Sensitivity (Fluorometric) ab107923

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

### Overview

<b>Product name</b>	Glucose-6-Phosphate Assay Kit - High Sensitivity (Fluorometric)
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
<b>Assay type</b>	Quantitative
<b>Sensitivity</b>	> 1 $\mu$ M
<b>Range</b>	1 $\mu$ M - 500 $\mu$ M
<b>Assay time</b>	0h 20m
<b>Product overview</b>	<p>Abcam's Glucose-6-Phosphate Assay Kit - High Sensitivity (Fluorometric) (ab107923) is a simple, sensitive and rapid means of quantifying glucose-6-Phosphate (G6P) in a variety of samples. In the assay, glucose-6-phosphate is oxidized with the generation of a product that converts a nearly colorless probe to an intensely fluorescent product (Ex/Em 535/587 nm). This assay can detect G6P in the range of 10 to 500 pmoles which is equivalent to the range of 1-500 <math>\mu</math>M in the original sample assuming a dilution of 5X during processing. This Glucose-6-Phosphate Assay Kit - High Sensitivity is more sensitive than our colorimetric assay, Glucose-6-Phosphate Assay Kit (<a href="#">ab83426</a>).</p>

Visit our [FAQs page](#) for tips and troubleshooting.

<b>Notes</b>	<p>This product is manufactured by BioVision, an Abcam company and was previously called K687 PicoProbe™ Glucose-6-Phosphate Fluorometric Assay Kit. K687-100 is the same size as the 100 test size of ab107923.</p> <p>Glucose-6-phosphate (G6P) is a key intermediate for glucose transport into cells which then enters either metabolic pathways or storage. G6P can enter the glycolytic pathway, the pentose phosphate shunt or be stored as glycogen or starch. G6P is utilized by its dehydrogenase to generate reducing equivalents in the form of NAD(P)H. This is particularly important in red blood cells where a G6PDH deficiency leads to hemolytic anemia.</p>
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<b>Platform</b>	Microplate reader
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### Properties

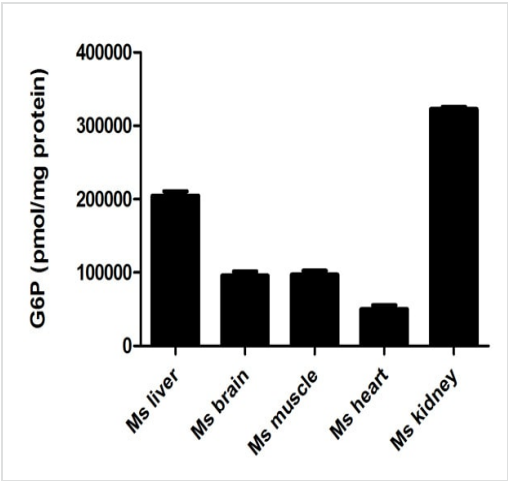
<b>Storage instructions</b>	Store at -20°C. Please refer to protocols.
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Components	100 tests
Glucose 6 phosphate assay buffer	1 x 25ml
Glucose 6 phosphate Enzyme Mix (lyophilized)	1 vial
Glucose 6 phosphate Standard (10 $\mu$ mol; lyophilized)	1 vial
Glucose 6 phosphate Substrate Mix (lyophilized)	1 vial
Probe (in DMSO)	1 x 0.4ml

Relevance

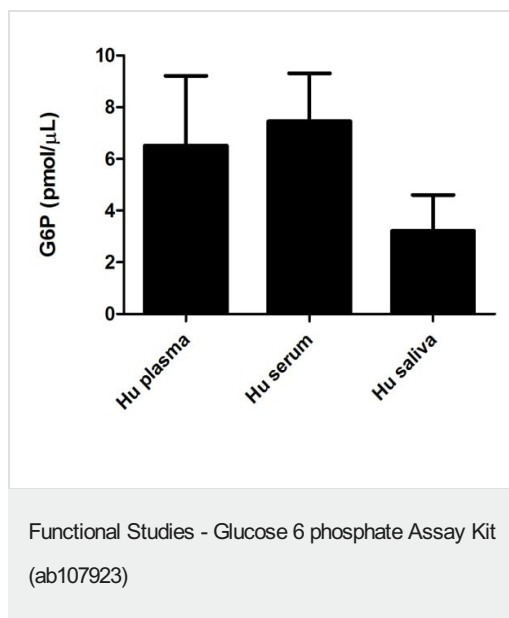
Glucose 6 phosphate (G6P) is a key sugar intermediate for glucose to get into cells, and then enter either metabolic pathways or storage. G6P can enter the glycolytic pathway, the pentose phosphate shunt or be stored as glycogen or starch. G6P is utilized by its dehydrogenase to generate reducing equivalents in the form of NADPH. This is particularly important in red blood cells where a G6PDH deficiency leads to hemolytic anemia.

Images

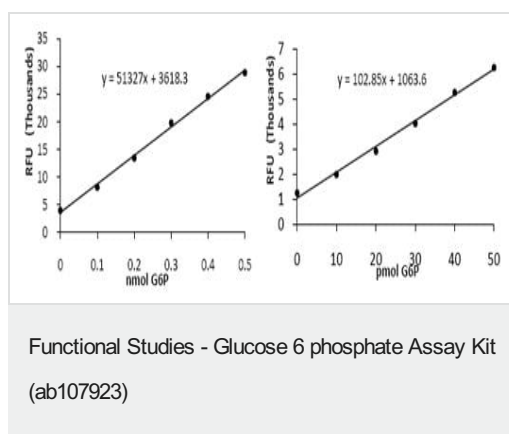


Glucose 6 phosphate measured in mouse tissue lysates showing quantity (pmol) per mg protein of tested sample

Functional Studies - Glucose 6 phosphate Assay  
Kit(ab107923)



Glucose 6 phosphate measured in biological fluids showing quantity (pmol) per microliter of tested sample



Glucose 6 phosphate standard curves (0 – 500 and 0 – 50 pmol range) generated using ab107923.

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

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