

Product datasheet

Glycerol-3-phosphate (G3P) Assay Kit (Colorimetric)
 ab174094

2 Images

Overview

Product name	Glycerol-3-phosphate (G3P) Assay Kit (Colorimetric)
Detection method	Colorimetric
Sample type	Cell Lysate, Tissue Lysate
Assay type	Quantitative
Sensitivity	< 2 nmol/well
Species reactivity	Reacts with: Other species, Mammals
Product overview	Abcam's Glycerol-3-Phosphate Assay kit (Colorimetric) (ab174094) is a sensitive, fast and easy-to-use kit. In this assay, G3P is oxidized by G3P Enzyme Mix to form an intermediate, which reduces a nearly colorless probe to a colored product with strong absorbance at 450 nm. This assay kit can detect G3P less than 2 nmol/well and can be used for a variety of sample types.

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

Notes	Glycerol-3-phosphate (G3P) is an important intermediate for all living organisms. Glycerol-3-Phosphate is produced either by glycerol via glycerol kinase or by dihydroxyacetone phosphate through glycerol-3-phosphate dehydrogenase. In response to cellular signals, glycerol-3-phosphate can be utilized in multiple pathways: it can be further converted into glyceraldehyde-3-phosphate and enter glycolysis or rapidly generate NAD ⁺ in brain or muscle tissues through the G3P shuttle or enter the lipid biosynthetic pathway. Recent studies have found that glycerol-3-phosphate is a novel regulator and plays a fundamental defense role in plant pathogenesis.
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Platform	Microplate reader
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Properties

Storage instructions	Store at -20°C. Please refer to protocols.
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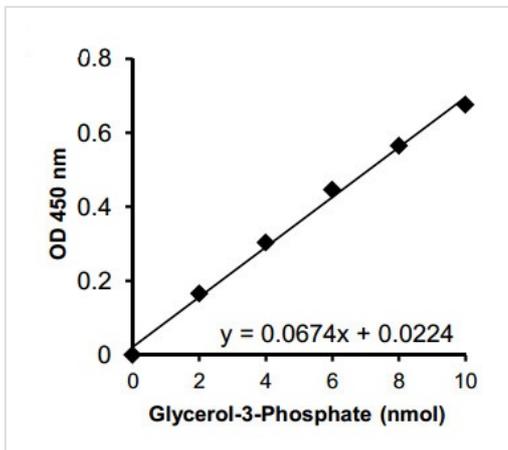
Components	100 tests
G3P Assay Buffer	1 x 25ml
G3P Enzyme Mix (Lyophilized)	1 vial

Components	100 tests
G3P Probe	1 vial
G3P Standard (Lyophilized)	1 vial

Relevance

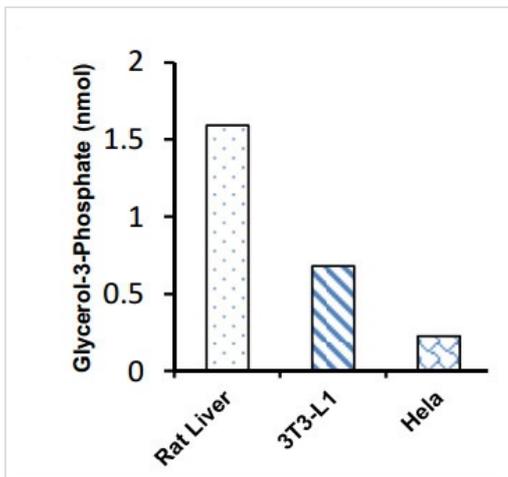
Glycerol-3-phosphate (G3P) is an important intermediate for all living organisms. Glycerol-3-Phosphate is produced either by glycerol via glycerol kinase or by dihydroxyacetone phosphate through glycerol-3-phosphate dehydrogenase. In response to cellular signals, glycerol-3-phosphate can be utilized in multiple pathways: it can be further converted into glyceraldehyde-3-phosphate and enter glycolysis or rapidly generate NAD+ in brain or muscle tissues through the G3P shuttle or enter the lipid biosynthetic pathway. Recent studies have found that glycerol-3-phosphate is a novel regulator and plays a fundamental defense role in plant pathogenesis.

Images



This is example data only.

G3P Standard Curve



Measurement of G3P in rat liver (100 µg), 3T3-L1 (40 µg) and HeLa (50 µg) lysate. This is example data.

Measurement of G3P in various samples

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