

Phosphate Assay Kit (Fluorometric) ab102508

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

Overview

Product name	Phosphate Assay Kit (Fluorometric)
Detection method	Fluorescent
Sample type	Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate
Assay type	Quantitative
Sensitivity	> 0.1 nmol/well
Range	2 μ M - 10 μ M
Assay time	2h 00m
Product overview	<p>Abcam's Phosphate Assay Kit (Fluorometric) provides a sensitive, easy, quick means of assessing phosphate over a wide range of concentrations. In the assay, inorganic phosphate reacted with maltose to produce glucose in the present of a special enzyme. The glucose is specifically oxidized to generate a product that reacts with the OxiRed probe to generate fluorescence (Ex/Em=535/587nm). The kit can be used to detect Pi produced through reactions involving ATPases, GTPases, 5'-nucleotidase, protein phosphatases, acid and alkaline phosphatases, and phosphorylase, etc. from a variety of samples. Glucose background can be eliminated by doing a glucose control.</p>

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

Notes This product is manufactured by BioVision, an Abcam company and was previously called K420 Phosphate Assay Kit (Fluorometric). K420-100 is the same size as the 100 test size of ab102508.

Inorganic phosphate (Pi) is one of the most important ions in biological systems. It functions in a variety of roles. One of the most important roles is as a molecular switch, turning enzyme activity on and off through the mediation of the various protein kinases and phosphatases in biological systems. A highly sensitive assay is desired to monitor Pi in variety samples or monitor Pi changes during kinase and phosphatase reactions.

Platform Microplate reader

Properties

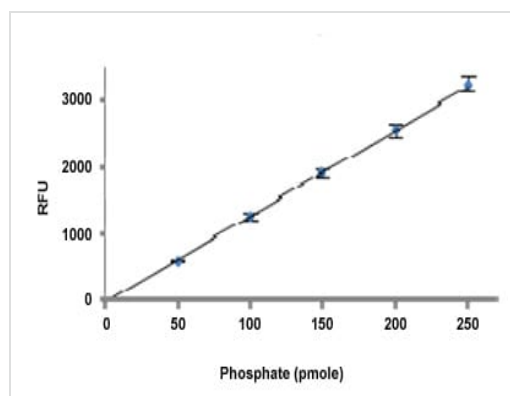
Storage instructions Store at -20°C. Please refer to protocols.

Components	100 tests	100 tests
Converter	1 vial	1 vial
Developer	1 vial	1 vial
Phosphate Assay Buffer	1 x 25ml	1 x 25ml
Phosphate Standard	1 x 500µl	1 x 50µl
Phosphate Substrate	1 x 0.2ml	1 x 0.2ml
PicoProbe (in DMSO)	1 x 200µl	1 x 200µl

Relevance

Phosphate is one of the most important of the inorganic ions in biological systems. It functions in a variety of roles. One of the most important roles is as a molecular switch, turning enzyme activity on and off through the mediation of the various protein kinases and phosphatases in biological systems. Phosphate is also of great importance in mineralization processes and is a primary stimulus of algal blooms frequently found in bodies of fresh water, due to run-off from areas of high fertilizer use.

Images



Phosphate Standard Curve - 2 hours

Functional Studies - Phosphate Fluorescent Assay
Kit (ab102508)

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