

# Malachite Green Phosphate Assay Kit

**Cat. No.** Kit-0555    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Malachite Green Phosphate Assay Kit is a non-radioactive method for measuring inorganic free phosphate in aqueous solution.

### Description

Malachite Green Assay Kit provides a fast, reproducible, and non-radioactive method for measuring inorganic free phosphate in aqueous solutions. This simple assay method is based on the complex formed between malachite green molybdate and free orthophosphate under acidic conditions. The formation of the green molybdophosphoric acid complex measured at 620-640 nm is directly related to the free organic phosphate concentration. Applications for this assay include quantification of phosphorylation and phosphate release from protein phosphatase substrates. This assay measures only inorganic free phosphate; lipid-bound or protein-bound phosphates must first be hydrolyzed and neutralized prior to measurement. Overall, this assay is a reliable and suitable means of detecting and quantifying minimal amounts of inorganic free phosphate in acidic environments and is amenable to high-throughput screening applications. The assay is formatted to low-volume 96-well plates, but could easily be modified for use in 96-well, 384-well, or cuvette-based assays.

### Usage

For research use only (RUO)

### Storage

MG Phosphate Standard (1M) Room Temperature  
MG Blue Solution 4°C (in the Dark)  
MG Acidic Solution 4°C (in the Dark)  
96-Well Solid Plate (low volume) Room Temperature  
96-Well Cover Sheet Room Temperature

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



**Kit Components**

MG Phosphate Standard (1M) 1 vial/100  $\mu$ MG Blue Solution 2 vials/1.8 mL  
MG Acidic Solution 2 vials/600  $\mu$ 96-Well Solid Plate (low volume) 2 plates  
96-Well Cover Sheet 2 covers

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA