

Certificate of Analysis

Product Name: pNPP Phosphatase Assay Kits

Catalog No.: Z5030009, Z5030010, and Z5030011

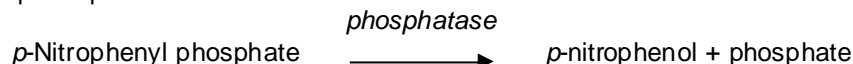
Shipping Condition: Room Temperature

Storage Condition: Reagent at -20°C, Assay buffer and Stop buffer at 4°C.

Shelf Life: 12 months from the date of receipt under proper storage conditions

Description

Para-nitrophenyl phosphate (pNPP) is a chromogenic substrate for most phosphatases such as alkaline phosphatases, acid phosphatases, protein tyrosine phosphatases and serine/threonine phosphatases. The reaction yields *para*-nitrophenol, which becomes an intense yellow soluble product under alkaline conditions and can be conveniently measured at 405 nm on a spectrophotometer.



This homogeneous "mix-and-measure" assay involves simply adding a single reagent to the phosphatase and measuring the product formation using any absorbance reader. The assay can be conveniently performed in cuvettes, tubes or multi-well plates at either room temperature or 37°C. In addition, the reagents are compatible with ELISA assays in which alkaline phosphatase conjugated secondary antibody is used. This kit is well adapted for a number of applications. For example, it can be utilized for direct characterization of enzyme activity and for assay condition optimization. It can also be applied for research diagnosis of diseases that are associated with increased levels of alkaline phosphatase. Typical diseases include liver disease, bone disease, Hodgkin's disease, congestive heart failure, Fanconi's syndrome, hyperparathyroidism, intestinal disease and abdominal bacterial infections. Moreover, it can be used to characterize phosphatase inhibitors through high-throughput screening.

The kit reagents have been optimized for long shelf life and maximum reproducibility. The reagents are compatible with all liquid handling systems and bulk reagents are available for high-throughput screening of phosphatase inhibitors.

Components

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: _____

