



pNPP Phosphatase Assay Kits

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.

APPLICATIONS:

Enzyme activity assay and quality control for phosphatase production. Assay kits allow convenient quantitation of enzyme activity [1].

Characterization of kinetics of phosphatase reaction [1].

High-throughput screening for phosphatase inhibitors: screening of phosphatase inhibitors can be performed in 96-well and 384-well microplates [2].

KEY FEATURES:

High sensitivity and wide linear range: detection of as little as 3 ng phosphatase.

Homogeneous and simple procedure: no wash or reagent transfer steps are involved. The assay can be completed within 30 minutes.

Robust and amenable to HTS: all reagents are compatible with high-throughput liquid handling instruments.

PRODUCT INFORMATION:

pNPP Phosphatase Assay Kit

POP-500

Each kit is sufficient for 500 assays in 96-well plate (or 2,000 assays in 384-well plate). Kit includes:

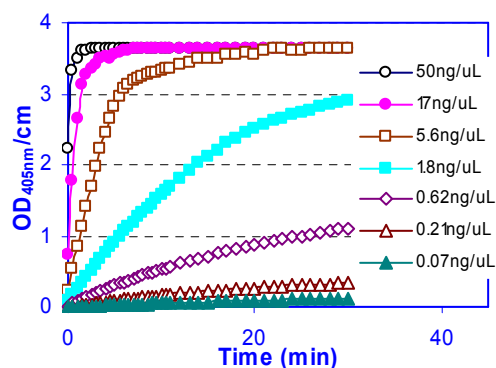
- 1 vial pNPP Substrate Reagent
- 1 x 25mL pNPP Assay Buffer
- 1 x 25mL Stop Solution

pNPP Phosphatase Assay Kit

POP-01K

Each kit is sufficient for 1,000 assays in 96-well plate (or 4,000 assays in 384-well plate). Kit includes:

- 1 vial pNPP Substrate Reagent
- 1 x 50mL pNPP Assay Buffer
- 1 x 50mL Stop Solution



Kinetics of PTP1B catalyzed pNPP hydrolysis. Assay was performed in a 384-well plate.

REFERENCES:

[1]. Urbanek RA et al (2001) Potent reversible inhibitors of the protein tyrosine phosphatase CD45. *J Med Chem.* 44: 1777-1793.

[2]. Marley AE et al (1996) Biochemical characterization and deletion analysis of recombinant human protein phosphatase 2C alpha. *Biochem J.* 320:801-806.