

# KPL pNPP Microwell Substrate Tablets

Catalog No. 5120-0057 (50-80-01)

<u>Size</u> 100 tablets

# **DESCRIPTION**

KPL pNPP Microwell Substrate develops a soluble yellow product when reacted with alkaline phosphatase-labeled conjugates in microwell plates. It is not recommended for membrane or immunohistochemical staining assays.

# **FORM**

5120-0057 (50-80-01) contains 100 (5 mg) tablets of p-Nitrophenylphosphate (pNPP).

### STORAGE/STABILITY

Store at 2-8°C. Stable for a minimum of 1 year from date of receipt when stored at 2-8°C.

# **CONTENT**

Each tablet contains 5 mg of *p*-Nitrophenylphosphate (*p*NPP).

# **USE**

# **Preparation**

Add 1 pNPP tablet to 5 mL of KPL DEA Buffer or other appropriate buffer and mix thoroughly to dissolve tablet. The tablet should be completely dissolved within 10 minutes. Substrate solution should be clear to slightly yellow. Warm to room temperature before use.

## **Recommended Substrate Volume**

Following incubation with phosphatase labeled conjugate, wash plate thoroughly. Add 100 µL freshly mixed substrate solution to each well. As the color develops, tap plate gently to mix.

# **ABSORBANCE MEASUREMENTS**

#### **Kinetic Assavs**

KPL *p*NPP phosphatase substrate produces a yellow color. Read at a wavelength between 405 - 410 nm.

# **Endpoint Assays**

The substrate remains yellow after the addition of a stopping solution. Read at a wavelength between 405 - 410 nm.

## **Stopping Solution**

To stop the pNPP reaction, add an equal volume (100  $\mu$ L) of 5% EDTA solution. Additionally, KPL APstop<sup>TM</sup> Solution may be used as well.

# When to Stop Substrate Reaction

The point at which the substrate reaction is stopped is often determined by the ELISA reader being used. Many ELISA readers record absorbance up to 2.0 O.D. The O.D. values of the plate should be monitored and the substrate stopped before positive wells are no longer recordable.

# **Reducing Substrate Intensity**

To reduce the intensity of the substrate reaction, it is recommended that the conjugate and/or antibodies in the immunoassay be further diluted. **Dilution of the substrate is not recommended.** 

## PRODUCT SAFETY AND HANDLING

See SDS (Safety Data Sheet) for this product.

RELATED PRODUCT KPL DEA Buffer	S CAT. NO. 5120-0058 (50-80-02)
KPL Coating Solution	5150-0014 (50-84-00)
KPL 10% BSA Diluent/Blocking Solution	5140-0006 (50-61-00)
KPL Wash Solution	5150-0008 (50-63-00)
KPL BluePhos <sup>®</sup> Microwell Phosphatase Substrate	5120-0059 (50-88-00)
KPL APstop Solution	5150-0026 (50-89-00)

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.

508.244.6400 • 800.676.1881 Toll Free • 508.634.3334 Fax

L-1003985-01 - February 2017