



K-Gold® Plus Substrate (PNPP)

Product Insert

Description

K-Gold Plus Substrate is a one bottle stabilized chromogenic substrate for use with alkaline phosphatase based immunoassays.

K-Gold Plus Substrate utilizes the substrate p-nitrophenyl-phosphate (PNPP), which is reacted upon by alkaline phosphatase to produce the chromophore p-nitrophenol.

Stability and Storage

K-Gold Plus is stable for a minimum of twenty four months from the date of manufacture and should be stored at 2-8°C in the dark. Neogen recommends Nalgene HDPE amber colored bottles for storage.

Appearance

Clear to faint yellow solution

Custom Packaging Service

Neogen can package K-Gold Plus Substrate in custom bottle sizes and volume fills to meet your specific packaging requirements. This service is a time and cost saving feature for any test kit manufacturer. For details on this service, please contact a Neogen Corporation representative.

Product #	Volume
339175	200 mL
339176	500 mL
339177	1 Liter
339257	20 Liters (1 x 20 Liters)

Recommended Handling

K-Gold Plus Substrate is sensitive to certain handling and storage conditions. Please note the following precautions when handling K-Gold:

Storage Containers - K-Gold Plus should only be stored in high quality amber colored plastic or glass bottles. Neogen recommends Nalgene HDPE amber bottles.

High Temperatures - K-Gold Plus is sensitive to elevated temperatures. It is suggested that the bottle of K-Gold Plus be returned to refrigerated temperature after aliquoting the quantity of K-Gold Plus necessary for an assay.

Redispensing Precautions - Never pipette directly from the K-Gold Plus storage bottle. Always pour necessary amounts into a separate container for use.

Do not leave the cap off the storage bottle of K-Gold Plus Substrate for long periods of time. When opening the substrate bottle place the top, open side up, to prevent contamination.

Directions for Use

K-Gold Plus is a ready-to-use solution. No mixing or additional reagents are required.

1. Thoroughly wash the microplate to remove all unbound conjugate. Discard wash buffer and tamp plate to ensure removal of all wash buffer. A significant amount of leftover wash buffer will hinder the performance of K-Gold Plus.
2. Add the desired amount of substrate to each well (100 μ l - 150 μ l is recommended). Use a multichannel pipettor for an entire plate.
3. Take absorbance readings with a microplate reader set at a wavelength of 405 nm. If dual wavelength readings are desired, set W1 at 405 nm and W2 at 490 nm or 650 nm.
4. The rate of color development can be read continuously in a kinetic mode or as an endpoint assay. Optimally, the desired OD_{405nm} should be reached within 30 minutes of adding the substrate.

Note: If the substrate reaction is too fast for your assay, adjust concentration of the antibody or conjugate. Do not dilute the substrate.
5. If it is desired to stop the reaction, add 50 μ L of stop solution, 3N NaOH to each well. Mix gently before reading the wells. Determine the absorbance at 405 nm.

Technical Information

For technical support, please contact our Technical Service Department, Monday - Friday from 8:00 am - 6:00 pm EST.

Phone: 800/477-8201 (USA/CANADA)
Phone: 859/254-1221 (International)
E-mail: techservice-lifesciences@neogen.com

Warranty

Neogen Corporation makes no warranty of any kind, either expressed or implied, except that the material from which its products are made are of standard quality. If any materials are defective, Neogen Corporation will provide a replacement product. Buyer assumes all risk and liability resulting from the use of this product and any of the predictive models. There is no warranty of merchantability of this product for any purpose. Neogen Corporation shall not be liable for any damages, including special or consequential damage, or expense arising directly or indirectly from the use of this product.

Intended for Research and Manufacturing Use Only