# ABTS® Peroxidase Substrate System (2 Component)

<u>Catalog No.</u> <u>Size</u>

50-62-00 6 x 100 mL 50-62-01 6 x 450 mL



# **DESCRIPTION**

This 2 component liquid substrate system develops a bluegreen product when reacted with peroxidase labeled conjugates in Microwell plates. It is not recommended for membrane or immunohistochemical staining assays. See KPL's catalog for appropriate substrates.

# **FORM**

Catalog No. 50-62-00 consists of the following: 3 x 100 mL ABTS Peroxidase Substrate Solution A (Catalog No. 50-64-00)

3 x 100 mL Peroxidase Substrate Solution B (Catalog No. 50-65-00)

Catalog No. 50-62-01 consists of the following:

3 x 450 mL ABTS Peroxidase Substrate Solution A (Catalog No. 50-64-02)

3 x 450 mL Peroxidase Substrate Solution B (Catalog No. 50-65-02)

# **CONTENT**

The ABTS Peroxidase Substrate System (2-Component) contains 2,2'-azino-di-(3- ethylbenzthiazoline-6-sulfonate) at a concentration of 0.3 g/L in a glycine/citric acid buffer. Peroxidase Substrate Solution B contains  $H_2O_2$  at a concentration of 0.02% in a proprietary buffer.

# STORAGE/STABILITY

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

# **USE**

PREPARATION: Mix equal volumes of ABTS Peroxidase Substrate Solution A and Peroxidase Substrate Solution B. Warm to room temperature before use.

SUBSTRATE DEVELOPMENT: Following incubation with peroxidase labeled conjugate, wash plate thoroughly. Add  $100~\mu L$  prepared substrate solution to each well. As the color develops, tap gently to mix. Incubation times will vary depending on your assay.

TO STOP REACTION: Stop reaction by adding an equal volume of ABTS Peroxidase Stop Solution (See RELATED PRODUCTS) or 1% sodium dodecyl sulfate (SDS) to the microwell plate. This will halt color development. ABTS substrate will remain blue-green after addition of stop solution.

TO READ REACTION: Read at a wavelength between 405 - 410 nm. Stopped reaction should be read within 30 minutes.

WHEN TO STOP SUBSTRATE REACTION: The point at which the substrate reaction is stopped is often determined by the ELISA reader. The OD values of the plate should be monitored and the reaction stopped before positive wells are no longer recordable.

TO REDUCE SUBSTRATE INTENSITY: Background is a sign of over-reaction with ABTS. To reduce the intensity of the substrate reaction, further dilution of the primary antibody and/or conjugate is recommended. Dilution of the substrate is not recommended.

# ABSORBANCE MEASUREMENTS

#### KINETIC ASSAYS:

ABTS substrate produces a blue-green color upon reaction with peroxidase. Read at a wavelength between 405 - 410 nm.

# **ENDPOINT ASSAYS:**

The addition of  $100~\mu L$  (or an equal volume) of stop solution to the microwell plate will halt color development. Read at a wavelength between 405 - 410~nm. Stopped reactions should be read within 30~minutes.

# RELATED PRODUCTS

ABTS Peroxidase Substrate Solution	Catalog No. 50-64-09
A 5000 mL	
ABTS Peroxidase Substrate Solution	Catalog No. 50-64-25
A 11250 mL	
Peroxidase Substrate Solution B 5000	Catalog No. 50-65-03
mL	
Peroxidase Substrate Solution B	Catalog No. 50-65-05
19500 mL	
Peroxidase Substrate Solution B 25 x	Catalog No. 50-65-25
450 mL	
ABTS Peroxidase Stop Solution	Catalog No. 50-85-01
Wash Solution Concentrate	Catalog No. 50-63-00
BSA Diluent/Blocking Solution	Catalog No. 50-61-00
Concentrate	
Coating Solution Concentrate	Catalog No. 50-84-00

See KPL's catalog for a list of antibodies, conjugates, substrates and complete systems for ELISA, blotting and immunohistochemistry.

# PRODUCT SAFETY AND HANDLING

See MSDS (Material Safety Data Sheet) for this product.

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Nothing disclosed herein is to be construed as a recommendation to use this product in violation of any patients. However, said information and product are offered without warranty or guarantee since the ultimate conditions of use and the variability of the materials treated are beyond our control. We cannot be responsible for patent infringements or other violations that may occur with the use of this product. No claims beyond replacement of unacceptable material or refund of purchase price shall be allowed.

ABTS is a registered trademark of Roche.