

## KPL ABTS<sup>®</sup> Peroxidase Substrate (1-Component)

<u>Catalog No.</u>	<u>Size</u>
5120-0041 (50-66-00)	6 x 100 mL
5120-0043 (50-66-06)	1000 mL
5120-0046 (50-66-18)	100 mL

### DESCRIPTION

KPL ABTS 1-Component Microwell Peroxidase Substrate develops a blue-green product when reacted with horseradish peroxidase labeled conjugates in microwell plates or tubes. The expected appearance of the solution is colorless to light green. Acceptable background absorbance of unreacted substrate is  $\leq 0.025$ , as measured at 405 nm. KPL ABTS 1-Component Microwell Peroxidase Substrate is not suitable for membrane or immunohistochemical staining.

### FORM/STORAGE/STABILITY

Content:

5120-0041 (50-66-00) contains 6 x 100 mL  
5120-0043 (50-66-06) contains 1 x 1000 mL  
5120-0046 (50-66-18) contains 1 x 100 mL

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

### CONTENT

KPL ABTS 1-Component contains 2,2'-azino-di (3-ethylbenzthiazoline- 6-sulfonate) at a concentration of 0.3 g/L in a glycine/citric acid buffer. The H<sub>2</sub>O<sub>2</sub> concentration is 0.01%.

### USE

Warm to room temperature before use. Solution is ready to use.

**Substrate Development:** Following incubation with peroxidase labeled conjugate, wash plate thoroughly. Add 100  $\mu$ L 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 KPL 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:** After stopping, 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 O.D. 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.

### PRODUCT SAFETY AND HANDLING

See SDS (Safety Data Sheet) for this product.

<b>RELATED PRODUCTS</b>	<b>CAT NO.</b>
KPL ABTS Peroxidase Stop	5150-0017 (50-85-01)
KPL 20X Wash Solution	5150-0008 (50-63-00)
KPL 10% BSA Diluent/Blocking Solution Concentrate	5140-0006 (50-61-00)
KPL Coating Solution Concentrate	5150-0014 (50-84-00)