

## KPL 1-Component TMB Membrane Peroxidase Substrate

<u>Catalog No.</u>	<u>Size</u>
5420-0027 (50-77-03)	200 mL
5420-0028 (50-77-04)	1000 mL
5420-0029 (50-77-18)	100 mL

### DESCRIPTION

KPL 1-Component TMB Membrane Peroxidase Substrate deposits a dark blue stain on membrane sites labeled with horseradish peroxidase. It is not optimized for immunohistochemical assays, or for assays requiring a soluble reaction product. The expected appearance of the solution is colorless to light amber or light blue.

### FORM/STORAGE/STABILITY

- 5420-0029 (50-77-18) contains 1 x 100 mL 1-Component TMB Membrane Peroxidase Substrate
- 5420-0027 (50-77-03) contains 2 x 100 mL 1 Component TMB Membrane Peroxidase Substrate
- 5420-0028 (50-77-04) contains 1 x 1000 mL 1 Component TMB Membrane Peroxidase Substrate

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

**NOTE:** Presence of fine, clear particulate matter may be observed, however, this does not affect product performance.

### CONTENT

KPL 1-Component TMB Membrane Peroxidase Substrate contains 3,3',5,5'- tetramethylbenzidine in an acidic buffer. The concentration of the H<sub>2</sub>O<sub>2</sub> is 0.02%.

### USE

The substrate is ready to use; no mixing or additional reagents are required. Warm to room temperature before use.

**Blocking:** BSA based diluent/blocking solutions may produce higher background response when used with TMB substrates. We have observed minimal background using a blocking/diluent solution of non-fat dry milk (NFDM) in PBS, or using KPL 5X Detector Block (see RELATED PRODUCTS).

**Recommended Substrate Volume:** Immerse membrane using approximately 1 mL substrate per 10 cm<sup>2</sup> membrane.

**Substrate Development:** Following incubation with peroxidase labeled conjugate, wash membrane thoroughly. Incubate membrane in substrate for 5 - 15 minutes, or until desired color is achieved. Incubation times will vary depending on your assay.

**To Stop Substrate Reaction:** Stop reaction by immersing membrane in reagent quality water for 20 - 30 seconds. The reaction should be stopped before background color becomes too intense resulting in insufficient contrast between positive staining and background.

**Membrane Storage:** Dry membrane thoroughly, seal with clear plastic and store in the dark to minimize fading.

**To Reduce Substrate Sensitivity:** High background or fading of the color in a few hours are signs of overreaction with KPL TMB Membrane Substrate. 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.

### RECOMMENDED HANDLING

KPL 1-Component TMB Membrane Peroxidase Substrate is extremely sensitive to certain handling and storage conditions. Avoid prolonged exposure to light, air or extreme temperatures. Do not refilter. Redispense only into amber Nalgene HDPE containers; avoid contact with silica-based materials including borosilicate glass. Redispense substrate using Cole-Parmer CFlex tubing and do not reuse tubing.

## KPL 1-Component TMB Membrane Peroxidase Substrate

<u>Catalog No.</u>	<u>Size</u>
5420-0027 (50-77-03)	200 mL
5420-0028 (50-77-04)	1000 mL
5420-0029 (50-77-18)	100 mL

<b>RELATED PRODUCTS</b>	<b>CAT. NO.</b>
KPL Milk Diluent/Blocking Solution	5140-0010 (50-82-00)
KPL Wash Solution	5150-0008 (50-63-00)
KPL 5X Detector Block	5920-0004 (71-83-00)

### **PRODUCT SAFETY AND HANDLING**

See SDS (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.