

## KPL 5X SignalOCK™ Blocking Solution

Catalog No.  
5440-0001 (50-58-00)

Size  
125 mL

### DESCRIPTION

KPL 5X SignalOCK Blocking Solution is a protein-free, buffered blocking material for Western blot protein detection. It is optimized to manage signal:noise contrast issues that are a consequence of pushing sensitivity limits when using more powerful substrates, or higher concentrations of primary antibody. Researchers face increasing challenges to detect proteins when the primary antibody has poor affinity, the target protein is poorly expressed or in low concentration, or has a short half life. One can push the Western blot application to its detection limit by increasing primary antibody concentration and/or utilizing a more powerful substrate. The consequence of altering those variables is the generation of greater background or noise. KPL SignalOCK Blocking Solution is optimized to manage the contrast of signal to noise so one can visualize protein bands otherwise lost in background.

### FORM/STORAGE/STABILITY

5440-0001 (50-58-00) consists of 1 x 125 mL bottle of KPL 5X SignalOCK Blocking Solution. The solution should be clear and free of particulates.

Store at 2-25°C. Stable for a minimum of one year from date of receipt when stored at 2 - 25°C.

### CONTENT

KPL 5X SignalOCK Blocking solution contains a proprietary non-proteinaceous blocking reagent, which is not of animal origin.

### USE

#### Preparation:

Before use, dilute 1:5 with reagent quality water.

#### Applications:

KPL SignalOCK Blocking Solution is a blocking material qualified to effectively block nitrocellulose and PVDF membranes. KPL SignalOCK is non-animal in origin, a non-protein material, and can be used as a diluent for antibody, protein or other antigens. Antibody A<sub>280</sub> quantitation readings can be performed in the presence of the blocker because it has negligible absorption at A<sub>280</sub>. KPL SignalOCK may also be used as a protein stabilizer.

### SUGGESTED WESTERN BLOT PROTOCOL

The protocol listed below contains guidelines for use. It is recommended that each individual assay be optimized.

1. Following electrophoresis and transfer, immerse the blot in enough 1X KPL SignalOCK Blocking Solution to allow the membrane to move freely in the solution. A minimum of 0.2 mL/cm<sup>2</sup> is needed.
2. Incubate for 1 hour at room temperature with shaking, or stationary overnight at 4°C.
3. Decant block solution.
4. Dilute primary and secondary antibodies in fresh KPL 1X SignalOCK Blocking Solution according to optimized antibody dilutions. Incubate for 30 – 60 minutes per antibody.
5. Ensure thorough washing between antibody incubations (3 X 5 minutes/wash at a minimum).
6. Detect with sensitive chemiluminescent or colorimetric substrate per manufacturer's instructions.

### PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by the Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Product may be disposed via sanitary sewer.

### RELATED PRODUCTS

	CAT. NO.
KPL LumiGLO Ultra™	5430-0039 (54-51-00)
Chemiluminescent Substrate	
KPL 20X Wash Solution	5150-0008 (50-63-00)

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