

# KPL Cy™5 - Labeled Streptavidin

<u>Catalog No.</u> <u>Size</u> 5270-0023 (072-02-30-00) 1.0 mg

## **DESCRIPTION**

Streptavidin is a 60,000 Dalton protein isolated from the bacterium *Streptomyces avidinii*. The use of streptavidin, rather than egg white avidin, as the bridging reagent ensures that these products demonstrate high sensitivity and specificity, and low background.

Streptavidin has been shown to bind four molecules of biotin with high affinity ( $Ka = 10^{15}M^{-1}$ ). Electrophoretically pure streptavidin was labeled with  $Cy^{TM}5$  using a proprietary method. Cy conjugates provide increased brightness and greater photostability than other fluorophores (ex. - FITC). This conjugate is designed for use in immunofluorescense assays, including flow cytometry, immunohistology, Western blotting, microarrays and FLISA.

#### FORM/STORAGE

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

## **STABILIZER**

IgG free bovine serum albumin (BSA) is added as a protein stabilizer. Non-sterile.

## PROTEIN CONCENTRATION

The quantity of the streptavidin conjugate is 1.0 mg as determined by UV absorbance at 280 nm. Upon rehydration with water, the solution will contain 1% BSA, 100 mM phosphate, 150 mM sodium chloride, 0.02% sodium azide, pH 7.4. The conjugate will be at a concentration of 1.0 mg/mL.

Use: Prior to use, dilute to the desired concentration with PBS or 1% BSA Di1uent/Blocking Solution. The diluted conjugate should be used immediately.

Storage: The rehydrated product is stable for a minimum of 1 year at 2-8°C.

### **F/P RATIO**

Molar fluorophore/protein ratio is from 0.8:1 - 2:1.

## **EXCITATION/EMISSION VALUES**

Cy5 is excited at 650 nm and emits at 670 nm.

#### REHYDRATION AND STORAGE

Note: Rehydration in buffers other than those listed here is not recommended.

Rehydration: Rehydrate with 1 mL of reagent quality water. Rotate the vial until the lyophilized pellet is totally dissolved.

<u>Use</u>: Prior to use, dilute to the desired concentration with PBS or KPL 1% BSA Di1uent/Blocking Solution. The diluted conjugate should be used immediately. <u>Storage</u>: The rehydrated product is stable for a minimum of 1 year at 2-8°C.

#### SUGGESTED WORKING DILUTIONS

Optimal working concentrations should be determined experimentally. Prepare working dilutions in PBS or other buffer such as KPL BSA Diluent/Blocking Solution. Dilution is not recommended for long-term storage. Suggested starting dilutions are listed below:

Histo/Cytochemical/Flow Cytometry: 1:100- 1,000 10 μg/mL - 1 μg/mL

#### PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by The Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with sin and eyes. In case of contact or spillage, clean with copious amounts of water. Dispose of via institutional guidelines.

# **TRADEMARKS**

Cy™ is a trademark of GE Healthcare, Inc.

RELATED PRODUCTS	CAT. NO.
KPL BSA Diluent/Blocking Solution	5140-0006 (50-61-00)
KPL Coating Solution	5150-0014 (50-84-00)
KPL Wash Solution	5150-0008 (50-63-00)
KPL Fluorescent Mounting Medium	5570-0005 (71-00-16)
KPL 10X PBS	5460-0023 (51-13-02)

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

508.244.6400 • 800.676.1881 Toll Free • 508.634.3334 Fax