

# KPL Fluorescein Labeled Streptavidin

## Catalog No.

5270-0028 (072-30-00)

## Size

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 sensitivity, high specificity and low background. Electrophoretically pure streptavidin is labeled with fluorescein isothiocyanate (FITC) using a modified proprietary method adapted from The and Felthamp <sup>(1)</sup>.

### FORM/STORAGE

Lyophilized. Store at 4°C until rehydrated. Stable for a minimum of 1 year from date of receipt at 4°C in the lyophilized state.

### STABILIZER AND PRESERVATIVE

Bovine serum albumin (BSA) added as a stabilizer. 0.01% (w/v) Sodium azide added as a preservative. Non-sterile.

### FLUOROCHROME:PROTEIN RATIO

Fluorochrome:streptavidin ratio = 2:1 - 5:1

### CONCENTRATION

The concentration is 1.0mg/mL as determined by UV absorbance at 280nm.

### SPECIFICITY/CROSSREACTIVITY

A single precipitin arc was observed against antiluorescein and anti-streptavidin when assayed by immunoelectrophoresis.

### REHYDRATION AND STORAGE

Two methods for rehydration and storage are recommended to accommodate most needs. Procedure A using 50% glycerol is preferred for extended storage. At a working dilution, the concentration of glycerol is negligible and will not affect most assays. The use of glycerol is not recommended when the conjugate is used in live cell work.

Storage at the working dilution for a prolonged period of time may result in performance loss. Avoid multiple freeze-thaw cycles.

### Procedure A:

**Rehydration:** Mix 1 mL glycerol with 1 mL reagent quality water. Transfer 1 mL of this 50% glycerol solution to the product vial. Slowly rotate the vial until the lyophilized pellet is totally dissolved. Dilute to desired concentration with PBS or other buffer such as KPL BSA Diluent/Blocking Solution prior to use.

**Storage:** This product may be stored for up to 1 week at 4°C; thereafter, it should be stored at -20°C. When stored at -20°C, product is stable for a minimum of 1 year.

### Procedure B:

**Rehydration:** Rehydrate with 1 mL reagent quality water. Dilute to desired concentration with PBS or other buffer such as KPL BSA Diluent/Blocking Solution.

**Storage:** This product may be stored for up to 1 week at 4°C; thereafter, it should be stored at -20°C. When stored at -20°C, product is stable for a minimum of 1 year.

### APPLICATIONS

Fluorescein labeled streptavidin is recommended for most types of fluorescent antibody staining procedures; also suitable for immunomicroscopy, flow cytometry and FACS analysis. The emission wavelength is 528 nm; the excitation wavelength is 495 nm. The absence of fluorescein labeled serum contaminants markedly reduces background signal.

### SUGGESTED WORKING DILUTIONS

Different assay conditions require that serial dilutions of all reagents be performed to determine optimal working concentrations. Prepare working dilution in PBS or other buffer such as KPL BSA Diluent/Blocking Solution (See RELATED PRODUCTS) immediately before use.

Suggested starting dilutions based on a 1.0 mg/mL stock solution are as follows:

Histo/Cytochemical Procedures:

1:200-1:500 (5.0 mg/mL - 2.0 mg/mL)

Flow Cytometry:

1:50-1:200 (20.0 mg/mL - 5.0 mg/mL)

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**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 a sanitary sewer.

**REFERENCE**

1. The & Felthamp, Immunology, 18:865, 1970.

**RELATED PRODUCTS**KPL BSA Diluent/Blocking  
Solution**CAT. NO.**

5140-0006 (50-61-00)

KPL Fluorescent Mounting  
Media

5570-0005 (71-00-16)

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