KPL R-Phycoerythrin Labeled Streptavidin

Catalog No.	Size
5270-0021 (0718-30-00)	1.0 mL

DESCRIPTION
Electrophoretically pure streptavidin is labeled with R-Phycoerythrin (R-PE). R-PE is a phycobiliprotein purified from seaweed. It has both a large extinction coefficient (approximately 2.0 X 10^5 M^{-1} cm^{-1}) and high quantum efficiency, making it an ideal fluorochrome for fluorescent assays [1,2,3].

FORM/STORAGE
Lyophilized. Store at 2-8°C and protected from light. Stable for 1 year at 4°C in the lyophilized state or 6 months after rehydration. **Do not freeze.**

STABILIZER AND PRESERVATIVE
Bovine Serum Albumin (BSA) is added as a protein stabilizer. 0.01% (w/v) sodium azide added as a preservative. Non-sterile.

REHYDRATION AND STORAGE
Rehydration: Rehydrate with 1 mL reagent quality water. Prior to use, dilute to desired concentration in PBS or other buffer such as KPL 10% BSA Diluent/Blocking Solution.

Storage: Store as an undiluted liquid at 2-8°C. **Do not freeze.** Stable for 6 months from date of rehydration when stored as directed.

FLUOROPHORE:PROTEIN RATIO
R-PE:streptavidin ratio = 2 - 4:1.

PURITY
A single precipitin arc is observed against anti-Phycoerythrin and anti-Streptavidin when assayed by immunoelectrophoresis.

APPLICATIONS
KPL RPE-labeled streptavidin is suitable for use in immunofluorescence assays requiring low background levels, including immunofluorescence microscopy, flow cytometry, and FLISA. It can be used in both single and multicolor analysis. The excitation wavelength for R-PE is 488 nm and emission is at 575 nm.

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 10% BSA Diluent/Blocking Solution immediately before use. Storage at a working dilution may result in conjugate inactivation and performance loss.

Suggested Starting Dilutions:

Histo/Cytochemical Procedures:	1:100-1:250
Flow Cytometry:	1:100-1:250

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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.

REFERENCES
1. Kronick, M.N., The use of fluorescent labels in immunoassay. *J. of Immuno. Review*, 92: 1-13, 1986.
2. Oi, V.T. , et al., Fluorescent phycobiliprotein conjugates for analysis of cell and molecules. *J. Cell Biology*, 93: 981-986, 1982.
3. Glazer, A., Stryer., Fluorescent tandem phycobiliprotein conjugates emission shifting by energy transfer. *Biochem J*., 43:383, 1983.

RELATED PRODUCTS	CAT. NO.
KPL 10% BSA Diluent/Blocking Solution	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.