



Flow Cytometry Reagents

Streptavidin-Allophycocyanin

Catalog Number: F0050

Lot Number: AEDP01

100 Tests

Reagents Provided

Streptavidin-Allophycocyanin:
Supplied as 10 µg of SA-APC in
1 mL saline containing up to 0.5% BSA
and 0.09% sodium azide.

Intended Use

Used as a secondary reagent in immunofluorescent assays using biotinylated primary labeling reagents. This product has been optimized for use with biotin-conjugated monoclonal antibodies.

Background Information

Streptavidin, a protein of 55,000 Daltons, is derived from *Streptomyces avidinii* and can bind 4 moles of biotin per mole of protein. The dissociation constant for biotin is approximately 10^{-15} M. The streptavidin-biotin complex is stable over a wide range of pH and temperatures. Streptavidin lacks carbohydrate residues present in the avidin molecule. This tends to reduce non-specific interactions with surface molecules and, therefore, streptavidin is preferred over avidin in many immunologic assays. Streptavidin can be covalently conjugated to fluorescent dyes and then used as a developer where the primary reagent was biotinylated.

Reagent Preparation

Streptavidin-Allophycocyanin (SA-APC) is provided in a ready-to-use liquid format containing up to 0.5% BSA and 0.09% sodium azide. Allophycocyanin has an absorption spectrum from 620 - 650 nm and has optimal emission at 660 - 670 nm. Store reagent at 2 - 8° C. **DO NOT FREEZE**. Reagent is stable for at least 6 months after purchase.

Sample Staining

Ten µL of Streptavidin-Allophycocyanin is added to a maximum of 1×10^6 cells in 100 - 200 µL that have been optimally stained previously with a biotinylated primary reagent. The reaction is then allowed to proceed another 30 - 45 minutes at 2 - 8° C **in the dark**. The cell mixture is then washed twice with 10 mM PBS. The final cell pellet is resuspended in 200 - 300 µL of 10 mM PBS for flow cytometric analysis. SA-APC stained cells should be kept in the dark if storage is required prior to flow cytometric analysis.

Note: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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