

Datasheet for ABIN964539
Streptavidin Protein (PE)



[Go to Product page](#)

4 Images

Overview

Quantity:	1 mL
Target:	Streptavidin
Origin:	Streptomyces avidinii
Host:	Please inquire
Purification tag / Conjugate:	This Streptavidin protein is labelled with PE.
Application:	Flow Cytometry (FACS), Immunomicroscopy (IM)

Product Details

Specificity:	Streptavidin Phycoerythrin was prepared from electrophoretically purified streptavidin isolated from Streptomyces avidinii conjugated to the chromophore R-Phycoerythrin. Free fluorochrome is removed by tandem molecular sieve chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Streptavidin
Abstract:	Streptavidin Products
Background:	Streptavidin is a bacterial protein (from Streptomyces avidinii) that has an exceptionally high binding affinity for biotin (B7). Streptavidin-biotin binding is one of the strongest known non-covalent interactions and is highly resistant to many conditions that would typically cause dissociation (such as organic solvents, denaturants, detergents, and extreme temperatures or pH). Streptavidin's affinity for biotin can be employed in a variety of experimental uses, from purifications to standards, to means of detection or pull down experiments. Phycoerythrin (PE)

Target Details

is a red-pigmented protein found in cyanobacteria and red algae. Phycoerythrin absorbs light blue-green/yellow light and emits lightly orange/yellow light.

Synonyms: Streptavidin PE, Phyco Streptavidin, SA Phycoerythrin, R-Phycoerythrin

UniProt: [P22629](#)

Application Details

Application Notes: Suitable for immunomicroscopy and flow cytometry or FACS analysis as well as other antibody based fluorescent assays requiring extremely low background levels, absence of F(c) mediated binding, lot-to-lot consistency, high titer and specificity. The maximum amount of Streptavidin Phycoerythrin required to stain 1 x 10E6 cells in flow cytometry is approximately 1.0 µg of antibody conjugate. Lesser amounts of Streptavidin Phycoerythrin may be sufficient for staining. Optimal titers for other applications should be determined by the researcher. As a general guideline dilutions of 1:100 to 1:250 should be suitable for most applications.

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Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 1.0 mL

Concentration: 0.5 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Preservative: Sodium azide

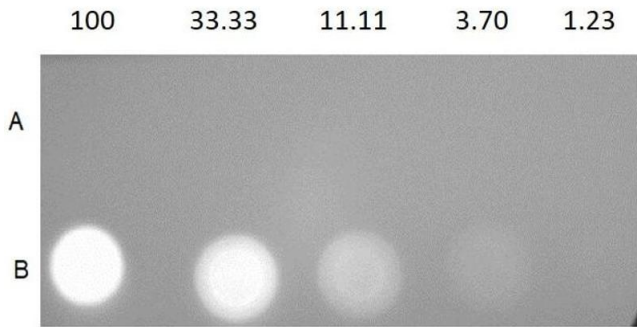
Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: 4 °C

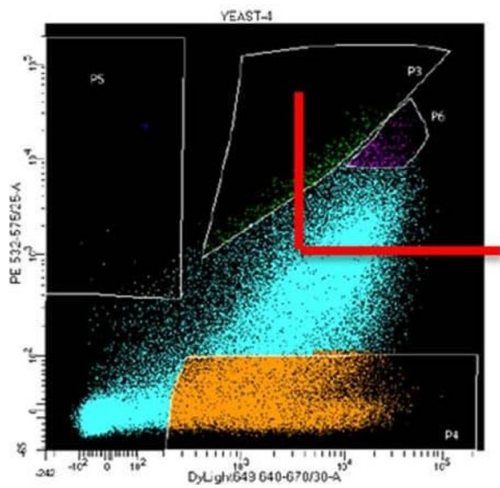
Expiry Date: 12 months

Images



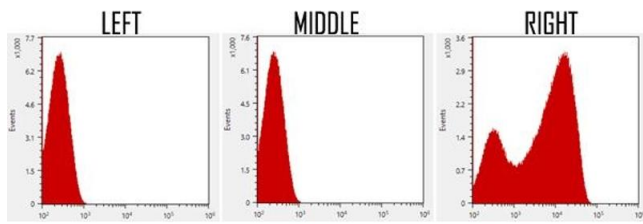
Dot Blot

Image 1. Dot Blot of Streptavidin Phycoerythrin conjugate. Row A: BSA [10 mg/mL]. Row B: BSA/Biotin [1.0 mg/mL]. Column Dilutions: 100 ng, 33.33 ng, 11.11 ng, 3.70 ng, 1.23 ng. Primary Antibody: Streptavidin Phycoerythrin Conjugate at 1 µg/mL for 1hr at RT. Secondary Antibody: None. Blocking: BlockOut Buffer (p/n MB-073).



Flow Cytometry

Image 2. Anti-FLAG DyLight™ 649 conjugate - X-axis (p/n 200-343-383) and Streptavidin-PE conjugate - Y-axis (p/n S000-08) are used in FACS sorting of yeast surface display camelid VHH immunized library to isolate yeast clones expressing antibodies to a target antigen. VHH antibodies displayed on yeast cell surface are tagged with FLAG epitope. Yeast library was doubly stained with Anti-FLAG DyLight™ 649 conjugate to monitor VHH expression and biotinylated antigen/Streptavidin-PE conjugate complexes to detect VHH binding to the antigen. Double positive yeast cells were isolated using FACSaria II cell sorter.



Flow Cytometry

Image 3. Cytoflow of Streptavidin-Phycoerythrin (p/n S000-08). Cells: Yeast *Saccharomyces cerevisiae* cells expressing surface receptor protein. [LEFT] unstained, [MIDDLE] Streptavidin-Phycoerythrin at 1:200 (negative control), [RIGHT] Streptavidin-Phycoerythrin at 1:200 with biotinylated ligand test sample.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN964539.