

Streptavidin (PE conjugated)

Alternate names: StAv

Catalog No.: RA021PE

Quantity: 1 ml

Concentration: 0.5 mg/ml (by UV absorbance = 82.0 at 565)

Background: Streptavidin, a tetrameric protein secreted by Streptomyces avidinii, binds tightly to a

small growth factor biotin. It finds wide use in molecular biology through its extraordinarily

strong affinity for the vitamin biotin; the dissociation constant (Kd) of the

biotin-streptavidin complex is on the order of ~10-15 mol/L. The high affinity recognition of biotin and biotinylated molecules has made streptavidin one of the most important

components in diagnostics and laboratory kits.

 Uniprot ID:
 P22629

 NCBI:
 1895

 Source:
 S. avidinii

Format: State: Lyophilized purified Ig fraction

Purity: Prepared from electrophoretically purified streptavidin isolated from Streptomyces avidinii conjugated to the chromophore R-Phycoerythrin. Free fluorochrome is removed by

tandem molecular sieve chromatographies.

Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride,

pH 7.2, with 10 mg/ml BSA as a stabilizer and 0.01% Sodium Azide as a preservative

Label: R-Phycoerythrin (R-PE) (MW 240,000 daltons). <u>Absorption/Emission Wavelength</u>: 488 nm/575 nm

OD566 nm/OD280 nm: 2.5

Reconstitution: Restore with 1.0 ml of deionized water (or equivalent).

Applications: This reagent has been specifically designed for the detection of biotinylated biological

probes such as antibodies or cytokines in Flow Cytometry or Immunhistochemisty.

The maximum amount of reagent to stain 1 x 10e6 cells in Flow Cytometry is approximately 1.0 μ g of Streptavdin RPE. Lesser amounts of reagent may be sufficient for staining. As a general guideline dilutions of 1/100-1/250 should be suitable for most applications.

Recommended Dilutions: Flow Cytometry: 1/100-1/250. IF Microscopy: 1/100-1/250

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.



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Storage: Prior to reconstitution store at 2-8°C.

Following reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General References: Conjugation References: Modified from the method of Carlsson J, Drevin H, and Axen R.

Protein thiolation and reversible protein-protein conjugation. Biochem J 173, 723-737

(1978).