

## R-PE Streptavidin (0.5 mg/mL)

Cat #: B-CHM318

Size: 1 ml

Storage: Store at 4°C protected from light.

### Product Introduction

Streptavidin protein conjugates can be used to detect biotinylated molecules with high sensitivity. They are commonly used as secondary reagents for detecting biotinylated primary probes in applications such as flow cytometry, protein immunoblotting, immunocytochemistry, and other antibody-based assays.

Red fluorescent protein R-phycoerythrin (R-PE) belongs to the phycobiliprotein family and is derived from cyanobacteria and eukaryotic algae. R-PE has maximum absorption at 496 nm, 546 nm, and 565 nm, and emits light at 578 nm. Due to its high extinction coefficient (~1960000) and high fluorescence quantum yield (0.82), R-PE is the brightest dye in the 565 nm wavelength range.

Streptavidin-R-phycoerythrin (R-PE) conjugates consist of streptavidin, a biotin-binding protein, covalently linked to a fluorescent label (R-PE). Streptavidin has a high affinity for biotin, and conjugates with streptavidin are commonly used together with conjugates containing biotin, specifically for detecting various proteins, protein motifs, nucleic acids, or other molecules. For example, after binding the target protein with a biotinylated primary antibody, the fluorescently labeled streptavidin can be used for detection. Streptavidin-R-PE conjugates have great utility in developing biotin-streptavidin detection schemes for flow cytometry, microplate assays, and chip-based applications. The streptavidin-R-PE conjugates are high-purity products (purity confirmed by HPLC) provided in solution form.

### Product Properties

**Form:** Red solution

**Spectral properties:** Ex / Em = 496, 546, 565 / 576 nm (in pH ~7.4 PBS)

**Solution components:** 0.5mg/ml in pH ~7.4 PBS, 2mg/mL bovine serum albumin (IgG and protease free), 0.05% sodium

azide

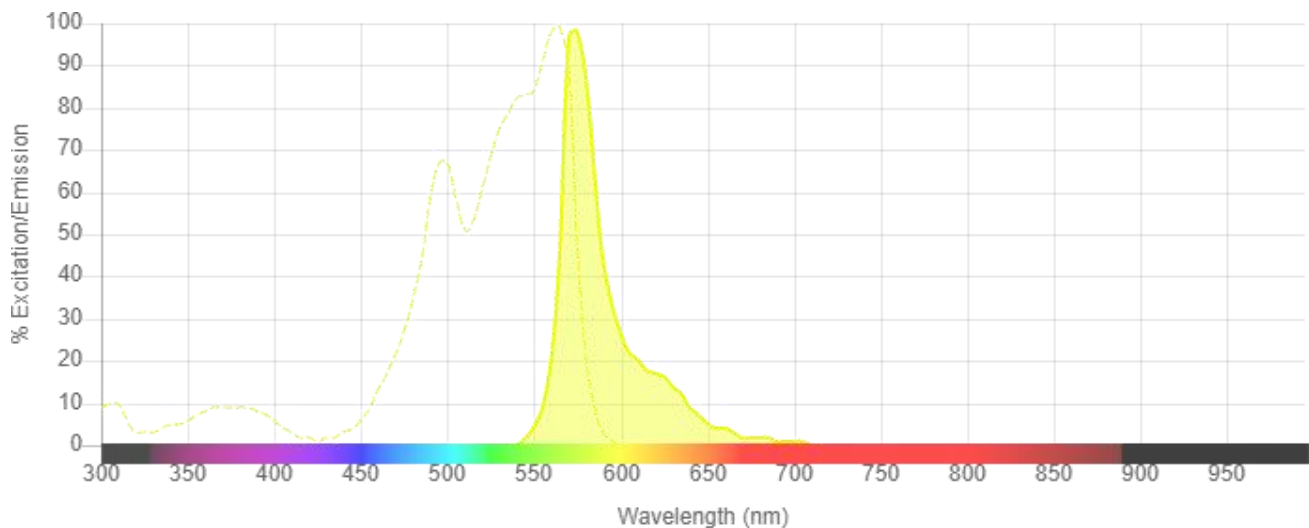
## Shipping and Storage

**Storage conditions:** Store at 4°C protected from light.

**Stability:** Stable for at least 6 months under proper storage conditions.

## Product Advantages

- Brightness 5-10 times higher than organic dyes
- Extremely high solubility in aqueous solutions
- No unconjugated streptavidin; in most cases, no unconjugated R-PE
- Highly suited for flow cytometry, microplate and microarray applications
- For most fluorescent streptavidin applications, recommended concentrations are 1-10 µg/mL, with optimal conditions to be determined by the user.



### Note:

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