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Product Information

STREPTAVIDIN-CY3 CONJUGATE

Product Number **S 6402**

Product Description

Streptavidin is isolated from *Streptomyces avidinii* by affinity purification. Purified streptavidin is covalently conjugated to Cy3 dye.¹

The conjugate is reactive with antiserum to streptavidin but not with antiserum to avidin, by immunoelectrophoresis (IEP).

The Streptavidin-Cy3 conjugate may be used in conjunction with biotinylated reagents in avidin/biotin labeling systems in immunohistochemistry and immunocytochemistry.

Reagents

The conjugate is provided as a solution at 1 mg/ml in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA and 15 mM sodium azide as preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C.

Product Profile

Spectral Characteristics of Cy3 Dye

Absorbance Max	552 nm
Emission Max	565 nm
Molar Extinction Coefficient	$1.3 \times 10^5 \text{ M}^{-1}\text{cm}^{-1}$

F/P Molar Ratio: 3-9

The F/P molar ratio of the Streptavidin-Cy3 conjugate is determined spectrophotometrically as follows:

$$F = A_{552}/1.3 \times 10^5$$

$$P = \frac{A_{280} - (A_{552} \times 0.05)}{2.0 \times 10^5}$$

$$\text{F/P Molar Ratio} = F/P$$

Where:

1.3×10^5 = Molar extinction coefficient of Cy3.

2.0×10^5 = Molar extinction coefficient of Streptavidin.

0.05 = Correction factor for Cy3 absorbance at 80 nm.

The minimum working dilution of 1:100 is determined by indirect labeling of formalin-fixed, paraffin-embedded human tonsil. A rhodamine filter set may be used in fluorescence microscopy. For double labeling experiments with fluorescein, a narrow band pass filter is recommended due to the emission overlap.

In order to obtain best results in different preparations and techniques, it is recommended that each individual user determine their optimum working dilution by titration assay.

References

1. Southwick, P., et al., Cytometry, **11**, 418 (1990).

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