


# eBioscience™ Streptavidin Super Bright 780

Catalog Number 78-4317-82

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 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](http://thermofisher.com/support).

## Product description

Streptavidin (SA, Sav) is a 52.8 kDa tetramer that binds to biotin with high affinity. Streptavidin fluorochrome conjugates are commonly used in indirect staining protocols to detect biotinylated primary antibodies in flow cytometry.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 or equivalent bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

## Product specifications

Concentration	0.2 mg/mL
Excitation/ Emission	405 nm/ 780 nm
Formulation	Aqueous buffer, 0.09% sodium azide. May contain carrier protein/stabilizer.
Storage	Store at 2–8°C, protected from light. Do not freeze.
Applications reported	Flow cytometric analysis.
Applications tested	Flow cytometric analysis to detect biotinylated primary antibodies.
Batch code	See product label.
Use by	See product label.

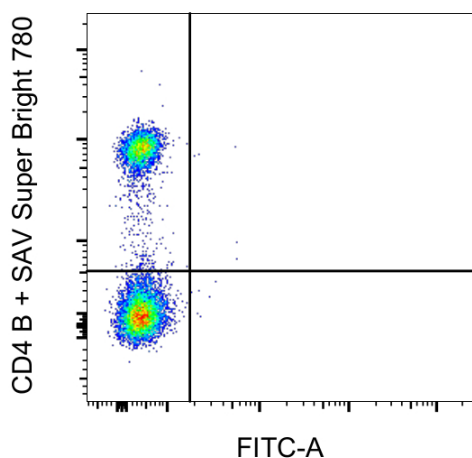
## Staining guidelines

- Workflow: Incubate cells with primary biotinylated antibody, wash twice, and stain with SA<sub>v</sub> conjugate.
- A test is defined as the amount (μg) of streptavidin fluorochrome conjugate that stains a cell sample in a final volume of 100 μL.
- Titrate streptavidin carefully to determine optimal performance in the assay of interest.
- Stain biotinylated primary antibodies with ≤ 0.125 μg/test.
- Determine optimal cell number empirically, but typical values can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.
- When using two or more Super Bright dye-conjugated antibodies in a staining panel, Super Bright Complete Staining Buffer (Cat. No. SB-4401-42) is recommended to minimize non-specific polymer interactions. See the datasheet for Super Bright Staining Buffer for more information.
- The tandem dye is sensitive to photo-induced oxidation. Protect the vial and stained samples from light.
- In some experiments using UltraComp eBeads microspheres (Cat. No. 01-2222-42) and AbC Total Antibody Compensation beads (Cat. No. A10497), we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when compared to single-color stained cells. In such circumstances, setting compensation with cells is recommended.

## Fixation guidelines

- Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.
- Samples can be stored in IC Fixation Buffer (Cat. No. 00-8222-49) (100 μL of cell sample + 100 μL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Cat. No. 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation.

## Experimental results



Swiss Webster mouse splenocytes were stained with 0.125 µg of CD4 Monoclonal Antibody, Biotin [Cat. No. 13-0042-82] followed by Streptavidin Super Bright 780. Total viable cells were used for analysis.

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## Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		



Life Technologies Corporation | 5781 Van Allen Way | Carlsbad, CA 92008

For descriptions of symbols on product labels or product documents, go to [thermofisher.com/symbols-definition](http://thermofisher.com/symbols-definition).

The information in this guide is subject to change without notice.

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