

## AMCA streptavidin

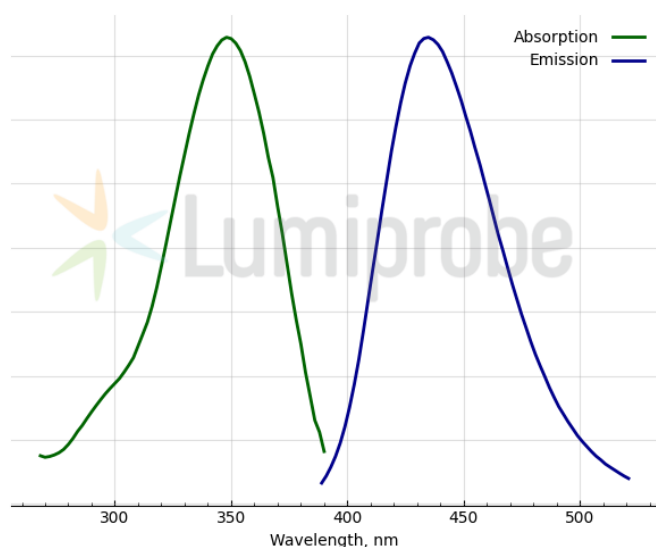
<http://www.lumiprobe.com/p/streptavidin-amca>

Streptavidin is a tetrameric biotin-binding protein derived from the bacterium *Streptomyces avidinii*. Streptavidin binds up to four biotin molecules with high affinity and selectivity via multiple hydrogen bonds and van der Waals interactions. Due to the lack of carbohydrate modifications and a near-neutral pI, streptavidin exhibits less nonspecific binding than another biotin-binding protein — avidin. Streptavidin also has high thermostability and resistance against extreme pH, denaturing agents, and enzymatic degradation, allowing using this protein under various experimental conditions.

Fluorescent conjugates of streptavidin are commonly used as a second-step reagent for specific detection of a variety of biotin-labeled biomolecules, such as proteins (antibodies, etc.), nucleic acids, lipids, and other molecules in indirect immunofluorescent staining, western blots, flow cytometry, microplate assays, and other detection techniques.

This streptavidin is a lyophilized conjugate with AMCA, one of the brightest blue fluorescent dyes.

The recommended concentration range for use is 0.5-10 µg/mL. Avoid using biotin-containing solutions (some serums, RPMI 1640, etc.) as diluents.



**Absorption and emission spectra of AMCA**

### General properties

Appearance:	white solid
Solubility:	good in water
Quality control:	Functional test, gel electrophoresis
Storage conditions:	Store at -20°C 9 months from date of receipt. Transportation: at room temperature for 1 week.
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### Spectral properties

Excitation/absorption maximum, nm:	348
$\epsilon$ , L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	17400
Emission maximum, nm:	435
Fluorescence quantum yield:	0.91