Synonym

Streptavidin,SA

Source

Streptavidin Protein-Alexa Fluor 555(STN-NA115) is expressed from E. coli cells.

Molecular Characterization

This protein carries no "tag".

The protein has a calculated MW of 13.8 kDa. The protein migrates as 15 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Conjugate

AF555

Excitation Wavelength: 561 nm

Emission Wavelength: 572 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with AF555 using standard chemical labeling method. The residual AF555 is removed by molecular sieve treatment during purification process.

Protein Ratio

The AF555 to protein molar ratio is *2-3*.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

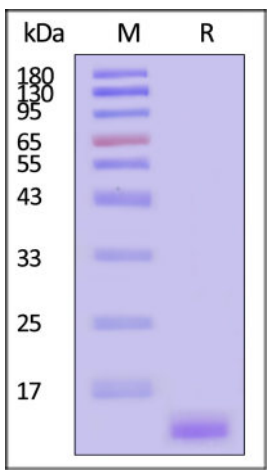
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

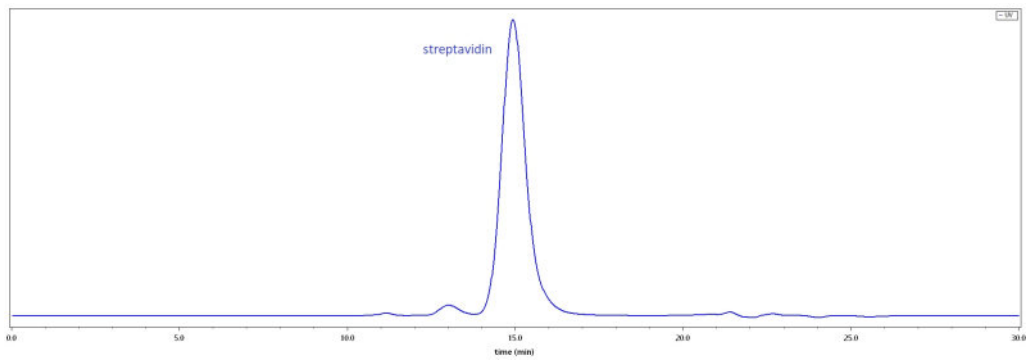
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Streptavidin Protein-Alexa Fluor 555 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Streptavidin Protein-Alexa Fluor 555 (Cat. No. STN-NA115) was greater than 95% as determined by SEC-HPLC.

Background

Streptavidin is a tetrameric protein purified from the bacterium Streptomyces avidinii, and exhibits high binding affinity for biotin. Able to bind one molecule of biotin with each subunit. Streptavidin (PI=6.0-7.5) has lower level of non-specific binding to various biological components at physiological pH than avidin (PI=7.4), resulting from its isoelectric point (PI).Streptavidin is useful in affinity chromatography, ELISA, immunohistochemistry and Western Blotting.

Clinical and Translational Updates