

## **Synonym**

Streptavidin, SA

#### Source

Streptavidin Protein-Alexa Fluor 488(STN-NA118) 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 under reducing (R) condition (SDS-PAGE).

# Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

## Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with AF488 using standard chemical labeling method. The residual AF488 is removed by molecular sieve treatment during purification process.

#### **Protein Ratio**

The AF488 to protein molar ratio is 1-2.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

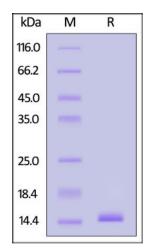
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

This product is stable after storage at:

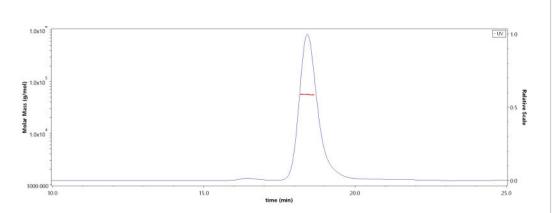
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Streptavidin Protein-Alexa Fluor 488 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **SEC-MALS**



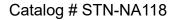
The purity of Streptavidin Protein-Alexa Fluor 488 (Cat. No. STN-NA118) is more than 90% and the molecular weight of this protein is around 48-65 kDa verified by SEC-MALS.

Report

# Background



# Streptavidin Protein-Alexa Fluor™ 488 (MALS verified)





Streptavidin is a 66KDa tetrameric protein purified from the bacterium Streptomyces avidinii, and exhibits high binding affinity to biotin. Each unit can bind one biotin. Horseradish peroxidase is metalloenzyme, a 44KDa glycoprotein. When incubate with substrates, it produces a coloured, fluorimetric, or luminescent derivatives, which can be detected and quantified. HRP conjugated Streptavidin is widely used for the detection and quantification of biotinylated proteins.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

