Streptavidin Protein-Texas Red

Catalog # STN-NT113

Synonym

Streptavidin,SA

Source

Streptavidin Protein-Texas Red(STN-NT113) is expressed from E. coli cells.

Molecular Characterization

This protein carries no "tag".

The protein has a calculated MW of 13.8 kDa.

Conjugate

Texas Red

Excitation Wavelength: 586 nm

Emission Wavelength: 603 nm

Labeling

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

Purity

>95% as determined by SDS-PAGE.

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

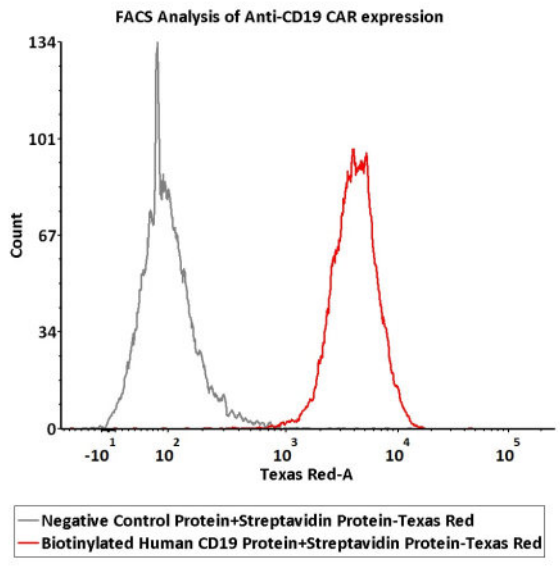
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

Bioactivity-FACS



5e5 of Anti-CD19 CAR-293 cells were stained with 100 μL of 20 ug/mL Biotinylated Human CD19 (20-291) Protein, Fc, Avitag™, premium grade (Cat. No. CD9-H82F6) and negative control protein respectively, washed and then followed with 1 μg/mL of Streptavidin Protein-Texas Red (Cat. No. STN-NT113) and analyzed with FACS. Texas Red signal was used to evaluate the binding activity (QC tested).

Background

The Streptavidin Protein Europium chelate is a universal tool for TR-FRET assays that can bind biotinylated molecules. This product uses high-purity streptavidin (SA) covalently conjugated with Eu^{3+} chelate, and it can be used in combination with other Acceptors directly or indirectly labeled with fluorescent dyes. When the Donor and Acceptor come into close proximity (within a distance of less than 10 nm), a FRET reaction occurs: the 620 nm signal emitted by the Donor upon excitation by a specific light source is received by the Acceptor, which then emits a 665 nm signal.