## Synonym

Streptavidin,SA

## Source

Streptavidin is expressed from E. coli cells and conjugated with alkaline phosphatase under optimal conditions.
Predicted N-terminus: Met

## Molecular Characterization

This protein carries no "tag".

The protein has a calculated MW of 13.8 kDa.

## Application

Recommended for use in ALP Chemiluminescence System such as CLEIA (0.1 μg/mL) or MPCLIA, immunohistochemistry, and western blot applications. Avoid using biotin-containing solutions as diluents. It is recommended that the reagent be titrated for optimal performance for each application. NOTE: Do not use skim milk as a blocking agent in the assay with streptavidin, since skim milk contains free biotin which will cause high backgrounds.

## Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 3 M NaCl, 1 mM MgCI2, 0.1 mM ZnCI2, pH7.5, 1% BSA, 0.03% Proclin300 with trehalose as protectant.

Contact us for customized product form or formulation.

## Shipping

***This product is supplied and shipped with dry ice, please inquire the shipping cost.***

## Storage

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

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

## Bioactivity-CLEIA


Immobilized Anti-SARS-CoV-2 Spike RBD Antibody, Chimeric mAb, Human IgG1 (Cat. No. S1N-M12A1) at 1 μg/mL (100 μL/well) can bind Biotinylated SARS-CoV-2 Spike RBD (L452R, T478K), His,Avitag (Cat. No. SPD-C82Ed) with a linear range of 0.0049-10 ng/mL when detected by Streptavidin Protein-ALP, Alkaline Phosphatase conjugated Streptavidin (0.1 μg/mL) (Cat. No. STN-NA117) (QC tested).

## Background

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