

Streptavidin(Cys)

Product Number: STR026

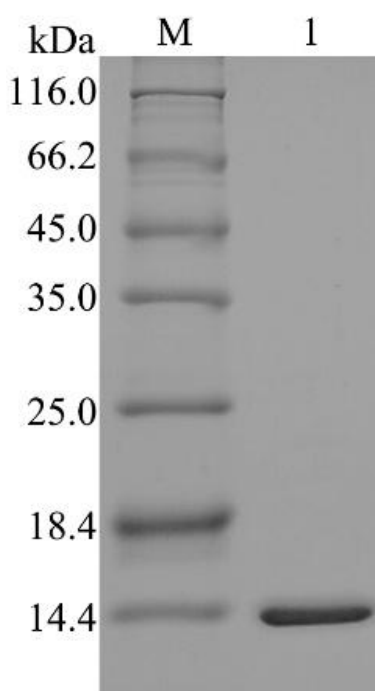
Description

Streptomyces avidini was originally isolated from the broth culture of Streptomyces avidini as a protein that can bind to biotin. Similar to avidin, streptavidin is composed of four identical subunits in a tetramer, each of which can bind to biotin. One molecule of streptavidin can bind to four molecules of biotin, and its binding affinity is very high ($K_d \sim 10^{-15}$). Compared with avidin, streptavidin has a lower isoelectric point and does not contain sugar groups. Therefore, when used in antigen antibody detection systems, its non-specific binding is much lower than avidin.

Streptomycin avidin has good thermal stability and certain tolerance to protein denaturants such as acid, urea, and SDS, making the biotin streptavidin system have advantages such as high affinity, sensitivity, specificity, stability, and signal amplification. It can be widely used in fields such as immunology, molecular biology, and histology.

This product selects the core sequence that maintains the activity of streptavidin for cloning and expression. Compared with natural streptavidin, proteins of the same quality have higher activity. At the same time, cysteine is added to the end of the amino acid sequence, and the thiol group of cysteine facilitates directional coupling with other molecules or carriers.

Product Name	Streptavidin(Cys)
Source	Escherichia coli
Molecular weight	13.5kDa
Isoelectric point	6.04
Purity	≥ 95% (SDS-PAGE)
A280nm (1mg/mL)	3.105
Form	Freeze drying agent, solution before freeze-drying is 5mM PB, pH 7.4
Solubility	Dissolve ≥ 10mg/mL in distilled water
Storage	Freeze dried powder -20 ± 5°C, avoid repeated freeze-thaw after dissolution
Validity period	Three years
Transport	Room temperature or low temperature



M: Protein molecular weight standard

1: Streptavidin(Cys)

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