

Recombinant Streptavidin

Product Number: STR001

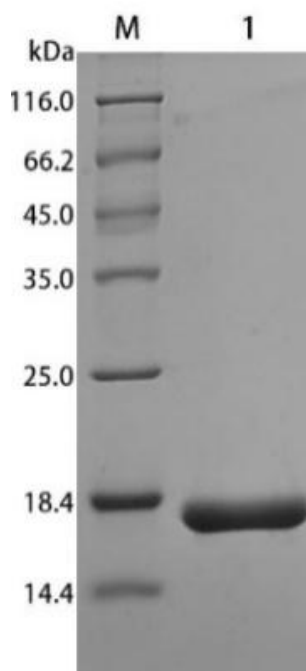
Description

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 retains the full-length sequence of natural streptavidin and has good solubility, with good solubility over a wide range of pH and ion strength.

Product Name	Recombinant Streptavidin
Source	Escherichia coli
Molecular weight	66.4kDa (16.6kDa/subunit)
Isoelectric point	6.06
Purity	≥ 95% (SDS-PAGE)
A280nm (1mg/mL)	2.523
Activity	≥ 12.5U/mg (1U is bound to 1μg biotin)
Form	Freeze drying agent, the solution before freeze-drying is an aqueous solution
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: Recombinant Streptavidin (electrophoretic sample heating treatment)

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