Tinzyme Co., Limited

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Streptavidin,core sequence

Product Number: STR002

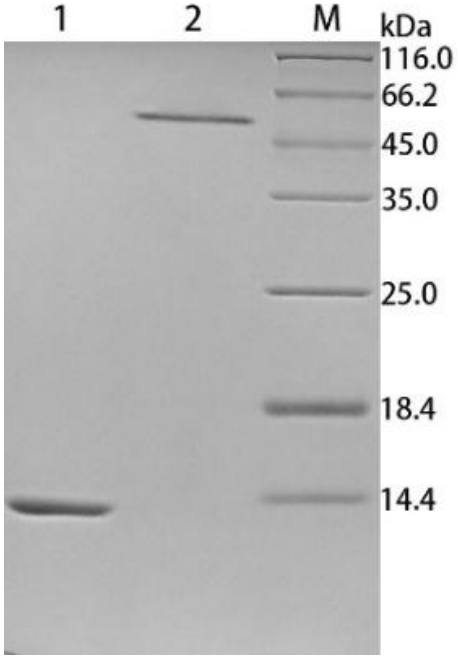
Description

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 (Kd~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.

Product Name	Streptavidin,core sequence
Source	Escherichia coli
Molecular weight	53.6kDa (13.4kDa/subunit)
Isoelectric point	6.04
Purity	≥ 95% (SDS-PAGE)
A280nm (1mg/mL)	3.129
Activity	≥ 16.0U/mg (1U is bound to 1μg biotin)
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℃, avoid repeated freeze-thaw after dissolution
Validity period	Three years
Transport	Room temperature or low temperature



1: Core Streptomyces avidin (electrophoretic sample heating treatment)

2: Core Streptomyces avidin (electrophoresis sample without heating treatment)

M: Protein molecular weight standard

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