

# Pure Streptavidin

Catalog No: tclC22683



## Available Sizes

**Size:** 25mg

**Size:** 250mg

**Size:** 1g



## Specifications

### Conjugation:

Unconjugated.

### Storage Buffer:

Lyophilized in 10mM potassium phosphate buffer pH 6.5.

### Source:

Escherichia Coli. Streptomyces avidinii.

### Purity / Grade:

>98% by SDS-PAGE and HPLC

Biotin-binding activity: >17 U/mg (Green's modified assay)

### Solubility:

It is recommended to reconstitute the lyophilized Streptavidin in sterile 18MΩ-cm H<sub>2</sub>O not less than 0.5mg/ml, which can then be further diluted to other aqueous solutions.

### Storage Instruction:

The lyophilized streptavidin is stable for at least one year when stored desicated at -20°C. It is recommended to only reconstitute the amount required for use. However, any unused reconstituted streptavidin should be aliquoted in working volumes without diluting and stored at -20°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles

### Calculated Molecular Weight:

52kDa.

**Sequence:**

MAEAGITGTWYNQLGSTFIVTAGADGALTGTYESAVGNAESRYVLT  
GRYDSAPATDGSGTALGWTVAWKNNYRNAHSATTWSGQYVGGA EARINTQWLLTSGTTEANAWKSTLVGHDTFTKVKPSAAS.

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**Protocol:**

Reconstitute in highly pure deionized water to 1-15 mg/ml. If buffering is required, add sufficient stock solution of 10-20X phosphate buffered saline (PBS) to bring the final concentration to 1X PBS. Do not reconstitute directly in PBS.

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**Notes**

Streptavidin is lyophilized under slight alkaline conditions from deionized water. The final lyophilized protein contains approximately 10% NaCl. Therefore, the streptavidin concentration should be determined by measuring the absorbance at A280 nm and calculated using the extinction coefficient.

**Product Description**

Streptavidin is a biotin binding protein present in the fermentation broth of the bacterium *Streptomyces avidinii*. Each molecule of streptavidin can bind four molecules of biotin with a high affinity constant ( $K_d \sim 10^{-15}$ ). Unlike native avidin, streptavidin is not glycosylated and has a near neutral isoelectric point ( $pI \sim 5-6$ ) vs a  $pI$  of 10 for native avidin.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!