

For life science research only.
Not for use in diagnostic procedures.



Streptavidin, recombinant **from *Streptomyces avidinii*, recombinant** **expressed in *E. coli***

 **Version: 10**

Content Version: December 2023

Cat. No. 11 721 674 001 5 mg

Store product at –15 to –25°C.

1.	General Information	3
1.1.	Contents	3
1.2.	Storage and Stability	3
	Storage Conditions (Product)	3
1.3.	Application	3
2.	How to Use this Product	4
2.1.	Before you Begin	4
	General Considerations	4
	Structure	4
2.2.	Parameters	4
	Affinity/Binding Capacity	4
	Contaminants	4
	Molecular Weight	4
	pH Stability	4
	Purity	4
	Specific Activity	4
	Temperature Stability	4
3.	Supplementary Information	5
3.1.	Conventions	5
3.2.	Changes to previous version	5
3.3.	Trademarks	6
3.4.	License Disclaimer	6
3.5.	Regulatory Disclaimer	6
3.6.	Safety Data Sheet	6
3.7.	Contact and Support	6

1. General Information

1.1. Contents

Vial / bottle	Label	Function / description	Catalog number	Content
1	Streptavidin, recombinant	Liquid formulation	11 721 674 001	1 vial, 5 mg

1.2. Storage and Stability

Storage Conditions (Product)

When stored at -15 to -25°C , the product is stable through the expiry date printed on the label.

Vial / bottle	Label	Storage
1	Streptavidin, recombinant	Store at -15 to -25°C .

1.3. Application

Use Streptavidin for coating of solid phases, such as microplates or beads, as well as for use with biotin-labeled haptens and antibodies in universal immunological detection systems, for example, the streptavidin/biotin system.

2. How to Use this Product

2.1. Before you Begin

General Considerations

Structure

The protein is free of carbohydrate. The four subunits consist of a molecular weight of approximately 13,000 Da, each containing a single biotin-binding site. Each subunit has six tyrosine residues.

2.2. Parameters

Affinity/Binding Capacity

$$K_D = 10^{-15} \text{ M}$$

Contaminants

Proteases: $\leq 10^{-3}$ U/mg protein (Azocoll, +25°C, 24 hours)

Molecular Weight

Approximately 52,000 Da.

pH Stability

pH 5.0 to 9.0

Purity

Streptavidin appears as a single band using SDS-PAGE.

Specific Activity

≥ 17 U/mg protein.

One unit binds 1 μg D-biotin at pH 8.9.

Temperature Stability

Up to +65°C.

Streptavidin is stable below +65°C in 0.01 M phosphate buffer, pH 7.2, 0.15 M NaCl.

⚠ 0.05 to 0.15 M NaCl increases the thermal stability of streptavidin solutions.

3. Supplementary Information

3.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

Text convention and symbols

 *Information Note: Additional information about the current topic or procedure.*

 **Important Note: Information critical to the success of the current procedure or use of the product.**

① ② ③ etc. Stages in a process that usually occur in the order listed.

① ② ③ etc. Steps in a procedure that must be performed in the order listed.

* (Asterisk) The Asterisk denotes a product available from Roche Diagnostics.

3.2. Changes to previous version

Changed the description in the subchapter Content.

Changed the storage temperature in the subchapter Storage and Stability.

Removed the subchapter Reconstitution.

Removed the subchapter Additional Equipment and Reagents Required.

Removed the subchapter Isoelectric Point.

3. Supplementary Information

3.3. Trademarks

All product names and trademarks are the property of their respective owners.

3.4. License Disclaimer

For patent license limitations for individual products please refer to:

Product Disclaimers.

3.5. Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

3.6. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

3.7. Contact and Support

To ask questions, solve problems, suggest enhancements or report new applications, please visit our **Online Technical Support Site.**

To call, write, fax, or email us, visit **sigma-aldrich.com**, and select your home country. Country-specific contact information will be displayed

