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

T4 Gene 32 Protein
from phage T4am*N* 134/ am*BL*292/ amE*219* infected *E. coli* B

Version: 18
Content Version: November 2021

Cat. No. 10 972 983 001	100 µg
Cat. No. 10 972 991 001	500 µg

Store the product at −15 to −25°C.

1. General Information

1.1. Contents

Vial / bottle	Label	Function / description	Catalog number	Content
1	T4 gene 32 protein	▪ Protein solution, 1 to 10 mg/ml. ▪ Storage buffer: 20 mM Tris-HCl, 100 mM NaCl, 1 mM EDTA, 0.5 mM DTT, 50% glycerol (v/v), pH 8.0.	10 972 983 001	1 vial, 100 µg
			10 972 991 001	1 vial, 500 µg

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	T4 gene 32 protein	Store at −15 to −25°C.

1.3. Application

The protein is used for stimulation of *in vitro* DNA synthesis and for stabilization of single-stranded regions of DNA or RNA.

- It has also been used in site-specific mutagenesis experiments in conjunction with T4 DNA Polymerase* and T4 DNA Ligase*.

2. How to Use this Product

2.1. Before you Begin

General Considerations

The protein is an essential component of the T4 DNA replication system and plays an important role in both DNA replication and recombination in T4-infected cells.

- T4 gene 32 protein is reported to increase the yield of PCR products amplified from samples which contain humic acid.
- The inhibitory effect of humic acid is reduced by a factor of 7 by this protein at a concentration of 2.5 µg/100 µl.
- The protein is isolated from the triple-mutant T4amN134/ amBL292/ amE 219 defective for the T4 genes 33, 35, and 58 to 61.

2.2. Parameters

Purity

>95% in SDS polyacrylamide gel electrophoresis.

Specificity

T4 gene 32 protein is a single-strand specific and thus a helix-destabilizing protein encoded by gene 32 of the phage T4 genome.

3. Additional Information on this Product

3.1. Quality Control

For lot-specific certificates of analysis, see section, **Contact and Support**.

4. Supplementary Information

4.1. 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.
❶ ❷ ❸ etc.	Steps in a procedure that must be performed in the order listed.
* (Asterisk)	The Asterisk denotes a product available from Roche Diagnostics.

4.2. Changes to previous version

Layout changes.
Editorial changes.

4.3. Ordering Information

Product	Pack Size	Cat. No.
Reagents, kits		
T4 DNA Polymerase	100 U, 1 U/µl	11 004 786 001
	500 U, 1 U/µl	11 004 794 001
T4 DNA Ligase	100 U, 1 U/µl	10 481 220 001
	500 U, 1 U/µl	10 716 359 001
	500 U, 5 U/µl	10 799 009 001

4.4. Trademarks

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

4.5. License Disclaimer

For patent license limitations for individual products please refer to:
List of biochemical reagent products and select the corresponding product catalog.

4.6. Regulatory Disclaimer

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

4.7. Safety Data Sheet

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

4.8. 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

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