

Product datasheet

Recombinant *S. cerevisiae* T4 DNA Ligase protein ab68649

製品の概要

製品名	Recombinant <i>S. cerevisiae</i> T4 DNA Ligase protein
タンパク質長	Full length protein

製品の詳細

由来	Recombinant
由来	Escherichia coli
アミノ酸配列	
生物種	Saccharomyces cerevisiae

特性

Our [Abpromise guarantee](#) covers the use of **ab68649** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

生理活性	167,000 U/ml. Unit Definition: One unit is defined as the amount of enzyme required to give 50% ligation of Hind III fragments of lambda DNA (5' DNA termini concentration of 0.12 μM, 300 μg/ml) in a total reaction volume of 20 μl in 30 minutes at 16 °C in 1X T4 DNA Ligase Reaction Buffer: (50mM Tris-HCl (pH 7.8 at 25°C), 10mM Magnesium chloride, 10mM DTT, 1mM ATP, 25 μg/ml BSA and DNA (0.1 to 1 μM in 5' termini)).
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アプリケーション	Functional Studies
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製品の状態	Liquid
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備考	T4 DNA Ligase can be inactivated by incubation at 65°C for 10 minutes. Optimal ligation occurs at 16°C. To dilute T4 DNA Ligase that will subsequently be stored at -20°C, 50% glycerol storage buffer should be used; to dilute for immediate use, 1x T4 DNA Ligase reaction buffer can be used. T4 DNA Ligase is strongly inhibited by NaCl or KCl if the concentration is > 200mM. Ligation of blunt-ended and single-base pair overhang fragments requires about 50 times as much enzyme to achieve the same extent of ligation as cohesive-end DNA fragments. Blunt-end ligation may be enhanced by addition of PEG 4000 (10% w/v final concentration) or hexamine chloride, or by reducing the ATP concentration to 50 μM.
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This protein can be used in Cloning of restriction fragments and joining linkers and adapters to blunt-ended DNA.

## 前処理および保存

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### 保存方法および安定性

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Preservative: None

Constituents: 50% Glycerol, 200µg/ml BSA, 50mM Potassium chloride, 10mM Tris HCl, 1mM DTT, 0.1mM EDTA, pH 7.4

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## Our Abpromise to you: Quality guaranteed and expert technical support

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- Replacement or refund for products not performing as stated on the datasheet
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