

# Hieff<sup>TM</sup> Novel T4 DNA Ligase (400 U/µL)

## **Product Information**

Product name	Cat#	Specification
Hieff <sup>TM</sup> Novel T4 DNA Ligase (400 U/µL)	10298ES40	40,000 U
	10298ES42	400 KU

#### **Product Description**

Hieff<sup>TM</sup> Novel T4 DNA Ligase is a single enzyme product that can be used for DNA fragments and adapters ligation during NGS library preparation. The product has been verified by high-throughput sequencing and has excellent quality. This enzyme has efficient ligation ability and is compatible with various samples.

#### **Product Components**

Componen	ts	10298ES40	10298ES42
10298-A	Hieff <sup>TM</sup> Novel T4 DNA Ligase (400 U/µL)	100 µL	1 mL
10298-В	$10 \times T4$ DNA Ligase Buffer	250 μL	2×1250 μL

#### Shipping and Storage

The components are shipped with ice packs and can be stored at -20°C for 2 years.

### **Unit Definition**

The amount of enzyme required to catalyze the ligation of more than 50% of the DNA fragments in a 20  $\mu$ L ligation reaction system is defined as 1 activity unit (U) when 6  $\mu$ g of  $\lambda$ DNA Hind III catabolite is reacted at 16 °C for 30 min.

#### Cautions

1. For your safety and health, please wear lab coats and disposable gloves for operation.

2. For research use only!

#### Instructions

The kit is compatible with the mainstream commercial end repair and dA-tailing modules for adapter ligation. Please refer to the following table to prepare the reaction system, vortex and spin down the contents and then place at 20 °C for 15 min.

Table 1 Adapter Ligation System		
Component	Volume (µL)	
dA-tailed DNA	60	
$10 \times T4$ DNA Ligase Buffer	10	
50% PEG 6000	10*	
DNA Adapter	X	
Hieff <sup>TM</sup> Novel T4 DNA Ligase	1-5	
ddH2O	To 100	

Note: 50% PEG 6000 is not provided in the kit, you need to prepare it yourself.