

Certificate of Analysis

T4 DNA Ligase

Catalog No.:	Z5040008
Lot No.:	
Source:	<i>Escherichia coli</i>
Size:	500 units
Concentration:	2.8 Weiss U/ μ L
Storage Buffer:	10 mM Tris-HCl (pH7.5), 50 mM KCl, 10 mM 2-mercaptoethanol, 0.1 mM EDTA and 50% glycerol
Reaction Buffer:	660 mM Tris-HCl, (pH 7.6), 66 MgCl ₂ , 100 mM DTT, 1 mM ATP
Unit Definition:	One unit is the amount of enzyme that ligates more than 90% of 6 μ g of λ DNA-Hind III fragments in a 20 μ l mixture in 30 minutes at 16 $^{\circ}$ C. One unit corresponds to 0.008 Weiss Units by the ATP-PPI exchange reaction.
Purity:	Exonuclease activity is not detected in any of the following cases, as judged from the intact gel electrophoresis pattern: <ol style="list-style-type: none">1. After incubation of 1 μg of λ DNA-Hind III fragments with 16 units of enzyme for 24 hours at 37$^{\circ}$C.2. After incubation of 1 μg of super coiled pBR322 DNA with 16 units of enzyme for 24 hours at 37$^{\circ}$C.3. After incubation of 1 μg of 5S rRNA with 16 units of enzyme for 24 hours at 37$^{\circ}$C.

Storage and Handling: -20 $^{\circ}$ C

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: _____

