



## T4 RNA Ligase 1

recombinant, *E. coli*

Cat. No.	Amount
RNT-007-S	5.000 units
RNT-007-L	4 x 5000 units

**Unit Definition:** One unit is defined as the amount of enzyme required to convert 1 nmol of 5'-[32P]rA16 into a phosphatase-resistant form in 30 minutes at 37° C.

**For *in vitro* use only!**

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** avoid freeze/thaw cycles

**Shelf Life:** 12 months

**Purity:** ≥ 95 % (SDS-PAGE)

**Form:** liquid

**Concentration:** 20 units/μl

### Description:

T4 RNA Ligase 1 catalyzes the ATP-dependent ligation of 5' phosphoryl-terminated nucleic acid donor to a 3' hydroxyl-terminated nucleic acid acceptor through the formation of a 3'→5' phosphodiester bond.

An ideal template is short single-stranded RNA (e.g. miRNA) that can be labeled at the 3'-OH group using labeled pCp as substrate. 3' End Labeling of longer RNA can be achieved with Poly(A) Polymerases.

Recommended final ATP concentration: 1 mM

### Content:

#### T4 RNA Ligase 1

#RNT-007-S: 1x 250 μl (20 units/μl)

#RNT-007-L: 4x 250 μl (20 units/μl)

10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 50% Glycerol (v/v), pH 7.5

#### T4 RNA Ligase 1 Reaction Buffer

#RNT-007-S: 1x 1 ml (10x)

#RNT-007-L: 2x 1 ml (10x)

500 mM Tris-HCl (pH 7.5), 100 mM MgCl<sub>2</sub>, 10 mM DTT

#### ATP - Solution

1x 100 μl (100 mM)

#### PEG-8000

1x 1.2 ml (50% (w/v))

#### Related Products:

pCp-Biotin, #NU-1706-BIO

pCp-Desthiobiotin, #NU-1706-Desthiobio

pCp-Cy3, #NU-1706-Cy3

pCp-Cy5, #NU-1706-Cy5

pCp-Azide, #NU-1708

PCR-grade water, #PCR-258