

## User Manual

Version 2.0

Product name: T4 DNA helicase

Cat #: T4DH-100, T4DH-200, T4DH-OEM

## Description:

T4 replication helicase (gp41) and polymerase (gp43) can be assembled onto a loading site located near the end of a long double-stranded DNA template in the presence of a macro-molecular crowding agent. This coupled two-protein system can carry out ATP-dependent strand displacement DNA synthesis at physiological rates (400 to 500 bp per sec), with high processivity in the absence of other T4 DNA replication proteins.

## Source:

An enzyme from the gene of bacteriophage T4 phage.

## Application:

DNA helicase is an enzyme that aids in DNA synthesis by 'unzipping' the two strands of a DNA helix so that DNA polymerase can access the DNA to add nucleotides and effect copying.

Recommended Storage Condition: -20°C