

Data sheet

This data sheet provided for information only

DiaTth DNA polymerase**RESEARCH USE ONLY****Recombinant DiaTth DNA polymerase**

(Deoxynucleosidetriphosphate: DNA Deoxynucleosidyltransferase E.C. 2.7.7.7.)

SOURCE:

Thermus Thermophilus HB8 strain

Cat.No.	Pack	Conc.
DTH-250	250 Units	5 U/μl
DTH-1000	1000 Units	5 U/μl

DESCRIPTION

DiaTth DNA Polymerase is a thermostable 92-94 kDa DNA Polymerase purified from E.coli PVG-AI recombinant strain expressing **Thermus Thermophilus** polymerase gene.

Amplification of target DNA fragments from 100 b.p. to 8500 b.p. can be achieved with this enzyme. **DiaTth** also exhibit the **reverse transcription activity** in presence Mn²⁺ion-much higher than that, demonstrated for Taq DNA polymerase.

Stability:

Shelf life 24 months if store at -20°C

UNIT DEFINITION

One unit defined as the amount of enzyme that incorporates 10 nmoles of dNTP's into acid-insoluble form in 30 minutes at 74°C under assay conditions.

STORAGE AND DILUTION BUFFER:

10mM K phosphate buffer (pH 7.0); 100mM NaCl; 0.5mM EDTA; 1mM DTT;50% glycerol, 0.1mg/ml BSA

AMPLIFICATION BUFFERS:

10X NH4-buffer: 166mM (NH₄)₂SO₄; 670mM Tris-HCL (pH 8.8 at 25°C); 0.1% Tween-20.

5X "Ready-to-load" NH4-buffer: 166mM (NH₄)₂SO₄; 670mM Tris-HCL (pH 8.8 at 25°C);0.1% Tween-2; two inherent dyes; stabilizers

CHELATING BUFFER (5X):

166mM (NH₄)₂SO₄; 670mM Tris-HCL (pH 8.8 at 25°C); 7.5mM EGTA;0.25% Tween-20;50% glycerol

ASSOCIATED ACTIVITIES:

Endonuclease and exonuclease activities were not detectible under standard assay condition.

APPLICATIONS:

- Routine PCR
- Primer extension
- DNA sequencing
- "one-tube" RT-PCR

STORAGE CONDITIONS :

Store **DiaTth** DNA Polymerase at -20°C for long term storage

SHIPPING CONDITIONS:

Should be shipped at ambient temperature
For long distance shipments preferably in **Blue Ice**