

HOT TERMIPol® DNA Polymerase

Hot-start DNA Polymerase for MALDI-TOF and other applications with unconventional nucleotides



91 /100 3 Citations

Thermostable hot-start DNA polymerase for highly efficient incorporation of unconventional nucleotides.

efficient incorporation of ddNTPs, acyNTPs, or fluorescent nucleotides

the assay success rate of 99% in MALDI-TOF

robust and reliable

reaction set-up and shipment without dry ice

Ordering

Choose Product Size

500 U | 100 µl

2000 U | 400 µl

500 U | 100 µl **free sample**

REQUEST FOR BULK SIZE

Some applications of this product may require a license which is not provided by the purchase of this product.

For research use only.

Reagents Provided

Item	Pcs.	Vial size
HOT TERMIPol® DNA Polymerase	1	500 U 100 µl
10x Reaction Buffer C	1	5 ml
100 mM MgCl ₂	1	5 ml

Description

HOT TERMIPol[®] DNA polymerase is a chemically modified TERMIPol[®] DNA polymerase. At ambient temperature it is inactive, having no polymerase activity.

HOT TERMIPol[®] DNA polymerase is fully activated by a 12-15 minute incubation at 95°C. This prevents the extension of non-specifically annealed primers. The enzyme contains 5'→3' polymerase activity and enhanced efficiency for incorporating unconventional nucleotides (ddNTPs and labeled ddNTPs).

Applications

MALDI-TOF mass spectrometry

Primer extension

Mass-array

Properties

Concentration: 5 U/μl

Hot-start: yes, activated by 12-15 minutes at 95°C

Error rate per nucleotide per cycle is app. 8×10^{-5}

Estimated half life at 95°C is 1.5 hours.

Storage and Dilution Buffer: 50% glycerol (v/v), 20 mM Tris-HCl pH 8.7 at 25°C, 100 mM KCl, 0.1 mM EDTA and stabilizers.

Source: Purified from an *E.coli* strain that carries an overproducing plasmid containing a modified gene of *Thermus aquaticus* DNA Polymerase.

Unit definition: One unit is defined as the amount of enzyme required to catalyze the incorporation of 10 nmol of dNTP into an acid-insoluble form in 30 minutes at 74°C.

Reagents

HOT TERMIPol[®] DNA Polymerase

10x Reaction buffer C: 500 mM Tris-HCl pH 9.5 at 25°C

100 mM MgCl₂

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