

# Methylamp Thermo DNA Polymerase

(Catalog No. R12016)

## Description

Methylamp Thermo DNA Polymerase is a highly processed thermostable DNA polymerase suited for MALDI-TOF mass spectrometry and other primer extension platforms. The enzyme has 5'→3' polymerization-dependent exonuclease replacement activity ONLY and enhanced efficiency for incorporating unconventional nucleotides (labeled ddNTPs & acyclo nucleotides).

## Concentration

5 units/μl (One unit is defined as the amount of enzyme required to catalyze the incorporation of 10 nmol of dNTPs into an acid-insoluble form in 30 minutes at 74°C).

## Composition

- Methylamp Thermo DNA Polymerase
- 10x Reaction Buffer Thermo: 500 mM Tris-HCl pH 9.5 at 25°C
- 100 mM MgCl<sub>2</sub>

## Applications

- Primer extension
- MALDI-TOF mass spectrometry
- Mass-array

## Source

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

## 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.

## Quality Data

The enzyme is free of nicking and priming activities, exonucleases and non-specific endonucleases. Activity and stability tested via thermocycling. The error rate per nucleotide per cycle is ~ 8 x 10<sup>-5</sup>. Estimated half-life at 95°C is 1.5 hours.

## Safety Warnings and Precautions

This product is designed for research purposes and in vitro use only. According to common laboratory safety practice, it is recommended to wear protective clothing, gloves and safety glasses. Please refer to [www.epigentek.com](http://www.epigentek.com) for Material Safety Data Sheet of the product. Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.

## Storage Conditions

Temporary storage for up to 1 month at room temperature has no detrimental effects on the quality of this reagent. However, routine storage at -20°C is strongly recommended.

## Ordering Information

Products	Size	Cat. No.
Methylamp Thermo DNA Polymerase	2000 Units	R12016-1

*This product is for research purposes only. Not intended for use in diagnostic procedures.*