

**DESCRIPTION:**

MEDNA M1 DNA polymerase (Taq) is a recombinant and thermostable Taq polymerase (expressed from the *Thermus aquaticus* gene, BRENDA: EC 2.7.7.7) expressed in *E.coli*. The enzyme is robust in amplifying DNA fragments from 100 bp to 10 kb. By the addition of A to the 3' end of the PCR product, the product can be cloned into TA vector efficiently.

**BACKGROUND:**

Taq DNA Polymerase is a thermostable DNA polymerase that possesses a 5'→3' polymerase activity and a 5' flap endonuclease activity. M1 DNA polymerase is used to amplify DNA in the polymerase chain reaction (PCR). It can also be used in gene amplification, sequencing and genotyping applications.

**BIOACTIVITY:**

Supplied with 10x Taq Pol II Reaction Buffer with or without 2.5 mM MgCl<sub>2</sub>. Concentration: 5 units/μL.

Unit definition: One unit will incorporate 10 nmols of total dNTPs into acid-precipitable DNA in 30 min at 74 °C.