



## Taq-DNA-Polymerase and Buffer Set

### Source

Purified from an E.coli strain carrying Taq-DNA-Polymerase overproducing plasmid. The original enzyme has been isolated from *Thermus aquaticus*.

### Associated activities

Taq-DNA-Polymerase is a highly processive 5' → 3'-DNA-polymerase with 5' → 3'-exonuclease activity. 3' → 5'-exonuclease activity lacks completely. Additionally, the enzyme adds nucleotides (mostly adenosines) to the 3'-ends of the DNA, so that TA-cloning is possible without further modifications.

### Application & Quality control

Primer extension reaction: the enzyme is free of nicking and primer extension activities as well as of exonucleases and unspecific endonucleases. SDS/PAGE: 95 kD-band, purity > 98%. Activity and stability tested via PCR. The error rate per nucleotide per cycle is  $\sim 8.3 \times 10^{-5}$ ; the accuracy  $\sim 1.2 \times 10^4$ . Estimated half life at 95°C: 90 min.

### Scope of delivery

100 µl Taq-DNA-Polymerase (5 u/µl)  
1.500 µl Reaction Buffer B (10×)  
1.500 µl Reaction Buffer BD (10×)  
1.500 µl MgCl<sub>2</sub> (25 mM)  
200 µl Solution S (10×)

<b>Quantity</b>	500 Units
<b>Concentration</b>	5 Units/µl
<b>Delivery</b>	non-chilled
<b>Storage</b>	at -20°C

	<b>Taq-DNA-Polymerase Set</b>
Cat. No.	<b>TK-005205</b>
Quantity	500