



## LABQ TAQ DNA POLYMERASE

LabQ Taq DNA Polymerase is a robust and reliable Taq DNA polymerase suitable for all common PCR applications like colony PCR, cloning applications, high-throughput PCR and routine PCR.

### STORAGE CONDITIONS

Store all components at -20°C and avoid repeated freeze and thaw cycles.

### MATERIALS PROVIDED

100 µl LabQ Taq DNA Polymerase 5 U/µl (**green cap**)  
2x 1.5 ml 10X PCR Buffer (**blue cap**)

### ADDITIONAL MATERIALS REQUIRED

Nuclease free dH<sub>2</sub>O  
Nuclease free PCR tubes / plates & sealing options  
Thermocycler  
PCR Primer (10 µM each)  
dNTP Mix (10 mM each)  
template DNA

### REACTION SETUP

- 1) Thaw all reaction components completely and mix gently to ensure even distribution of all components. Prepare the reaction on ice in a sterile, nuclease free tube and mix gently after addition of the polymerase. Collect all liquid at the bottom of the tube by a quick spin.

COMPONENT	VOLUME	FINAL CONCENTRATION
10X PCR Buffer	5 µl	1X
dNTP Mix (10 mM each)	0.5 µl	0.1 mM each
Primer 1 (10 µM)	1 µl	0.1 µM – 0.5 µM
Primer 2 (10 µM)	1 µl	0.1 µM – 0.5 µM
LabQ Taq DNA Polymerase (5 U/µL)	0.2 µl	1 U
template DNA	1 µl	<1 µg
dH <sub>2</sub> O	to 50 µl	

- 2) Keep the reactions on ice until transfer to the thermocycler, then cycle according to these guidelines:

STEP	CYCLES	TEMPERATURE	DURATION
Initial Denaturation	1	94°C	5 minutes
		94°C	30 seconds
Amplification	30-35	T <sub>m</sub> – 5°C	30 seconds
		72°C	1 minute / kb
Final Extension	1	72°C	5 minutes
Hold	1	4°C	

- 3) Analyse the amplification reaction by gel electrophoresis using an acrylamide or agarose gel of appropriate percentage.