Medix Biochemica

Product Manual
Cat. No: #1101

Taq DNA Polymerase Hot-Start

Description

Taq DNA Polymerase Hot-Start is supplied together with the 10x Taq reaction buffer. The reaction buffer has been specifically designed for optimal PCR performance and polymerase activity. Taq DNA Polymerase Hot-Start can also be used for real-time cycling, when adding a suitable real-time dye or a fluorescent probe.

Applications include standard PCR, real-time-PCR (addition of suitable dye or probe required), primer extension reactions, TA cloning, 3'A-tailing of blunt ends, and screening / high-throughput PCRs.

Kit components

Component	S pack*	L pack*
Taq DNA Polymerase Hot-Start	1 x 80 µL	2 x 400 µL
10x Taq reaction buffer	2 x 1.25 mL	13 x 1.25 mL

*Other pack sizes, bulk orders and customization are available upon request.

Storage and shipment

Transport with cool packs. The reagents should be stored at -20°C upon arrival. The reagents are stable until the expiration date if stored correctly.

Reaction master mix set-up

The recommended master mix set-up for a 50 µL reaction volume is shown in the table below.

Reagent	Volume (µL)	Final concentration
Taq DNA Polymerase Hot-Start (5 U/µL)	0.25	1.25 U/rxn
10x Taq reaction buffer	5	1x
∞Forward primer (10 µM)	1	0.2 µM (0.05–1 µM)
∞Reverse primer (10 µM)	1	0.2 µM (0.05–1 µM)
dNTPs (2 nM)	5	200 µM
Template / Sample extract	X	<1000 ng* DNA
Nuclease-free water	Up to 50 µL final volume	

Keep all components on ice.

Spin down and mix all solutions carefully before use.

∞Primers should ideally have a GC content of 40–60% typically.

*Suggested template concentration should be about 1 ng – 1000 ng (genomic DNA) or 1 pg – 1 ng (plasmid/viral DNA) per reaction.

Instrument and program set-up

Cycles	Steps	Temperature	Time
1	Initial denaturation	95°C	2 min
25–40	Denaturation	95°C	15 sec
	Annealing*	54–72°C	30 sec
	Extension	72°C	1 min /1000 bp

*Typically, the annealing temperature is about 3–5°C below the calculated melting temperature of the primers used.

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Technical information and support

For technical enquiries or assay development support, please contact us via e-mail at: mdx@medixbiochemica.com.

Additional information and technical resources are available on our website at: info.medixbiochemica.com/resources.

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