kemoTaq™ Hot-Start DNA Polymerase 500U

25 APR 2024

Catalog Number	Size	Concentration
DP002-0100	500 units	5 units/µl

Storage Conditions

Stable for up to 2 years at -20°C

Description

Due to the characteristic of kemoTaq DNA Polymerase, it will not be activated when treated beneath 75℃ and will effectively excluding the nonspecific binding that happens in regular temperature or nonspecific amplification caused by primer dimers, which will only be activated by incubating in 95℃ for 10 min. It also leads to the fact that it is stable and could be operated in room temperature without ice when preparing the PCR cocktail. Also, there will be an "A" base at the 3' -end of the PCR products amplified by this enzyme which can be directly used in TA cloning.

Kit Content(s)

kemoTaq™ Hot-Start DNA Polymerase	50 µl x 2 vials
5X PCR reaction buffer	1.3 ml x 2 vials

Required materials but not provided

- A compatible PCR instruments
- Vortex or equivalent
- Microcentrifuge
- Plates and seals for your instruments

Reaction Setup

1. For each 50 µl reaction, assemble the following in a 0.2 ml PCR tube on ice just prior to use:

Component	Volume	Final Conc.
DNA template*	- µl	-
Forward primer, 10 µM	1 µl	0.5 µM
Reverse primer, 10 µM	1 µl	0.5 µM
dNTP Mix (10 mM each dATP, dCTP, dGTP, dTTP)	1 µl	200 µM
5X PCR buffer	10 µl	-
kemoTaq™ Hot-Start DNA Polymerase	0.5-1 µl	-
PCR Grade Water	Add to 50 µl	-
Total volume	50 µl	-

*DNA template: 50-1000 ng genomic DNA, 1-30 ng plasmid, or 1-2 µl cDNA from RT-PCR.

5F., No. 145, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City, Taiwan (R.O.C.)
TEL : +886-2-2462-4956 / FAX : +886-2-2462-8849
www.bio-helix.com

2. Mix gently. If necessary, centrifuge briefly and cap tubes.
3. Place them into a Thermocycler and process for 25-35 cycles as follows:

Step	Condition	Cycles
Initial Denaturation	10 min at 95°C	
Denaturation	30 sec at 95°C	25-35 cycles
Annealing	30 sec at 55-65°C	
Extension	1 min/kb at 72°C	
Final extension	5-10 min at 72°C	

Note: Optimal conditions for amplification will vary depending on the primers and thermal cycler used. It may be necessary to optimize the system for individual primers, templates, and thermal cyclers.

5F., No. 145, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City, Taiwan (R.O.C.)
TEL : +886-2-2462-4956 / FAX : +886-2-2462-8849
www.bio-helix.com