



Hieff Unicon™ Hotstart Direct Taq DNA Polymerase, 5 U/μL

Product description

Hieff Unicon™ Hotstart Direct Taq DNA Polymerase is a hot start DNA polymerase that is resistant to blood and other inhibitors. The product is blocked by antibodies and has good amplification sensitivity and specificity. After heating for 30 seconds at the pre-denaturation temperature, the antibody is completely inactivated and the DNA polymerase activity is released. The amplification induced by nonspecific annealing of primers could be effectively inhibited by using the hot start Taq enzyme.

Components

Components No.	Name	10717ES72 (250 U)	10717ES76 (500 U)	10717ES80 (1000 U)	10717ES92 (10 KU)	10717ES93 (25 KU)	10717ES94 (50 KU)
10717	Hotstart D-Taq (5 U/μL)	50 μL	100 μL	200 μL	1 mL × 2	1 mL × 5	10 mL

Storage

The product should be stored at -20°C for 2 years.

Instructions

1. Reaction Composition

Components	Volume (μL)	Final Concentration
2×Buffer ^a	25	1×
Primer/Probe Mix ^b	X	0.1 - 0.5 μM
Hotstart D-Taq (5 U/μL) ^c	1.2	0.12 U/μL
Template DNA ^b	X	0.1 - 100 ng
ddH ₂ O	to 50	-

Note: Be sure to mix well before use, avoid excessive bubbles caused by violent vibration.

a) According to the specific experimental application, it is needed to prepare the corresponding reaction buffer. If a basic buffer (10×) is required, Cat#11374 is recommended.

b) The amount of DNA and the concentration of probes or primers are recommended concentrations. The optimal concentration can be adjusted according to the specific experimental conditions.

c) The amount of enzyme can be adjusted according to the experimental application.

2. Optimized Cycling Protocol

	Reaction stage	Temperature	Time	Cycle
1	Initial denaturation	95°C	5 min	1
2	Amplification reaction	95°C	15 sec	45 cycles
		60°C ^a	30 sec ^b	

Note:



- a) Amplification reaction: The temperature is adjusted according to the T_m value of the designed primers.
- b) Fluorescence signal acquisition: Please set the experimental procedure according to the requirements of the instrument manual.