TOROBlue® One HS Taq Kit

Cat No. : TAO-200 Vol: 50μl×40 Reactions

DESCRIPTION

TOROBlue® One HS Taq Kit includes two components, 2× One HS Taq Mix and TOROBlue® 6×DNA Loading Buffer. 2× One HS Taq Mix is a ready-to-use premixed solution containing hotstart Taq DNA polymerase, PCR buffer, dNTPs and PCR enhancer. This mix contains all components for PCR except primers and template DNA. This mix shows specific and efficient amplification. 1 volume of TOROBlue® 6×DNA loading buffer premixed with 5 volumes of PCR products can be directly loaded into the post-staining or precasting agarose gel.

FEATURES

- Enables greater PCR performance than conventional Taq DNA polymerase.
- This reagent contains anti-Taq antibodies for hot start PCR. Hot start technology realizes highly specific and sensitive PCR.
- Easy-to-use: offer TOROBlue® 6×DNA loading buffer premixed with 5 volumes of PCR products can be directly loaded into the gel.

APPLICATIONS

- General PCR products for TA cloning.
- Colony direct PCR
- Multiplex PCR for SNPs etc.
- High-throughput PCR.

COMPONENTS

The kit includes the following reagents, which can be used for 200 reactions for a total 50ul reaction volume, or 500 reactions for a total 20ul reaction volume.

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2× One HS Taq Mix	1ml ×5tube
TOROBlue® 6×DNA loading buffer	1ml ×2 tube

PROTOCOL

1. Standard reaction setup

(1)All components should be completely thawed before preparing the mixture.

Component	Reaction volume
PCR grade water	Xμl
2× One HS Taq Mix	25μl
10uM Forward primer	1μl
10uM Reverse primer	1μl
Template DNA	Yμl { Genomic DNA: ≤200 ng; Plasmid DNA: ≤50 ng; *E. coli* colony
Total Volume	50μl

(2) Gently mix the reaction solutions and spin down in microcentrifuge

2.Cycling conditions

[3-step cycle]

Predenaturation : 94°C, 2min.
Denaturation : 94°C, 30 sec.
Annealing : (Tm -5) °C, 30 sec.
Extension : 68°C, 1min. /kb
Incubation: 4°C

25-45 cycles

[2-step cycle]

Predenaturation :95°C, 30 sec.
Denaturation : 98°C, 30 sec.
Extension : 68°C, 1min. /kb
Incubation: 4°C

25-45 cycles

3.Electrophoresis.

(1)Add 1 volume of TOROBlue® 6×DNA loading buffer to 5 volumes of PCR products.
(2) Mix well, spin down and load the mixture and the suitable TOROBlue® Loading Marker
(3)Directly loading the PCR products and the suitable TOROBlue® Loading Marker into the post-staining or precasting agarose gel.
(4)Run on agarose electrophoresis to detect PCR products and marker.

RELATED PRODUCTS

→Loading Marker:
BDL-029 TOROBlue® 100bp DNA loading Marker
BDL-037 TOROBlue® 1.5kb DNA loading Marker
BDL-036 TOROBlue® 5000bp DNA loading Marker
BDL-031 TOROBlue® 1kb DNA loading Marker
BDL-200 TOROBlue® DL2000 DNA loading Marker

→Nucleic Acid Staining Dye:
RSD-105 TORORed® Nucleic Acid Staining Dye
GSD-105 TOROGreen® DNA Staining Dye

→Reagents for Electrophoresis :
AGR-100 Agarose
TBE-054 5×TBE Buffer

→Instruments for Electrophoresis :
MINI-300 Mini Pro 300V Power Supply
MJ-105A Mini Horizontal Gel Electrophoresis System
MBE-300 Mini BluView Transilluminator
MBE-200A BluView Transilluminator
UVCI-2400 SmartView Pro Gel Imaging System

→High fidelity PCR Kit:
KAO-101 TOROGreen® One HS KOD Kit

STORAGE

This reagent his reagent can be stored at 4°C for 1 months. For longer storage, this reagent should be kept at -20°C.