



TOROGreen® One HS Taq Kit

Cat No. : TGO-100B Vol: 50µl×40 Reactions

DESCRIPTION

TOROGreen® One HS Taq Kit includes two components, 2× One HS Taq Mix and TOROGreen® 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. TOROGreen® 6×DNA loading buffer contains the fluorescence dye, which is directly detected on 470nm LED transillumination after the DNA electrophoresis.

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 TOROGreen® 6×DNA loading buffer premixed with fluorescent dye for directly observed on 470nm LED transilluminator after electrophoresis.

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.

Cat No. : TGO-100B

2× One HS Taq Mix	1ml ×5tube
TOROGreen® 6×DNA loading buffer	1ml ×2 tube
We also offer more small package as the following.	
Cat No. : TGO-100S	
2× One HS Taq Mix	0.5ml ×1tube
TOROGreen® 6×DNA loading buffer	0.2ml ×1 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

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. ← 25-45 cycles
 Annealing : (Tm -5) °C, 30 sec.
 Extension : 68°C, 1min. /kb
 Incubation: 4°C

[2-step cycle]

Predenaturation :95°C, 30 sec.
 Denaturation : 98°C, 30 sec. ← 25-45 cycles
 Extension : 68°C, 1min. /kb
 Incubation: 4°C

3. Electrophoresis.

- (1) Add 1 volume of TOROGreen® 6×DNA loading buffer to 5 volumes of PCR products.
- (2) Mix well, spin down and load the mixture and the suitable TOROGreen® Loading Marker
- (3) Run on agarose electrophoresis to detect PCR products and marker. No additional dye is required for the PCR products and marker.
- (4) Realtime observation of electrophoresis is also possible if a 470nm blue light source is fitted to the electrophoresis tank.
- (5) Use the 470nm blue-light transilluminator or imaging systems photograph the gel.

RELATED PRODUCTS

→ Fluorescent Loading Marker:

- GDL-029 TOROGreen® 100bp DNA loading Marker
- GDL-037 TOROGreen® 1.5kb DNA loading Marker
- GDL-036 TOROGreen® 5000bp DNA loading Marker
- GDL-031 TOROGreen® 1kb DNA loading Marker
- GDL-200 TOROGreen® DL2000 DNA loading Marker

→ High fidelity PCR Kit:

KAO-101 TOROGreen® One HS KOD Kit

→ Reagents for Electrophoresis :

- AGR-100 Agarose
- TAE-504 50×TAE Buffer
- 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

STORAGE

This kit should be kept at -20°C and protected from light.