enzynomics

2X TOPsimple™ DyeMIX-nTaq

Cat.#	Size
P510T	1 ml (0.5 ml X 2)
P525T	2.5 ml (0.5 ml X 5)

Store at 20℃

India Contact:

Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA).
Ph: +91-11-42208000, 42208111, 42208222
Mobile: +91-9810521400
Fax: +91-11-42208444
Email: customerservice@lifetechindia.com
Web: www.lifetechindia.com

Product description

2X TOPsimple™ DyeMIX-*n*Taq is similarly formulated to the 2X TOPsimple™ PreMIX-*n*Taq except that it contains loading dyes for further convenience of use. Thus, the reaction mixtures after PCR cycles are ready for agarose gel electrophoresis. This product includes *n*Taq DNA Polymerase (Cat.# P725, P750), and is optimized for high efficiency PCR amplification with a high success rate.

Characteristics

- 2-Dye system: Easy for gel electrophoresis (Xylene cyanol and Orange G)
- A-tail formation at 3′ ends of amplified duplex DNA

Applications

- Amplification of DNA fragments shorter than 3 kb (Suitable for general PCR analysis)
- Amplification of cDNA and genomic DNA.
- Primer extension
- Colony PCR
- Multiplex PCR

Components

- *n*Taq DNA Polymerase: 0.2 units/μl
- *n*Taq buffer (containing 3 mM Mg^{2+})
- dNTP mixture: 0.4 mM each (2X)
- Stabilizer
- Dye: Xylene cyanol and Orange G

Migration of dyes in agarose gel

In an ordinary agarose gel, xylene cyanol co-migrate with 4-kb DNA fragments, and Orange G with 50-bp DNA fragments.

Use of the product

- To carry out PCR amplification, add template DNA and a pair of primers dissolved in water (10 μl) to the same volume (10 μl) of 2X TOPsimple™ DyeMIX-nTaq
- Completely thaw the premix solution prior to use.
- Frequent cycles of freezing and thawing reduce activity.
- Recommend using the 2X TOPsimple™ DyeMIX-nTaq as soon as possible once thawed.

Storage

Stable up to 18 months at -20℃ or 3 months at 4℃ (Storage at -20℃ is recommended).

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Your Molecular & Cell Technology Partner

Standard PCR conditions

- PCR mixture[a]

2X TOPsimple™ DyeMIX-*n*Taq	10 μl
Template DNA[b] (0.1~500 ng/μl)	1 μl
Primer 1 (5 pmole/μl)	1 μl
Primer 2 (5 pmole/μl)	1 μl
Distilled water	up to 20 μl

[a]Assemble the reaction mixture on ice
[b]Plasmid DNA, 0.1 ng~30 ng; genomic DNA, 50 ng~500 ng

- PCR cycles

Initial denaturation	95℃	2 min
Denaturation	95℃	30 sec
Annealing[a]	55℃~65℃	30~60 sec
Elongation	72℃	1 min/kb
Number of cycles	25~35 times	
Final elongation	72℃	5 min

When cycles are over, keep the reaction mixture at 4°C; may add 10 mM EDTA until use to prevent DNA degradation.
[b]Recommended annealing temperatures is 5 to 10℃ below the lower Tm of the two primers used.

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