Yeastern Biotech Co., Ltd

Product Use Limitation & Warranty

This product is intended to be used for life science research only. It has not been approved for drug or diagnostic purpose. YEASTERN's products should not be resold, modified for resale, or used to manufacture commercial products without written approval by YEASTERN. YEASTERN guarantees the performance of all products in the manner described in our protocol. The purchaser must determine the suitability of the product for its particular use. Should any product fail to perform satisfactorily due to any reason other than misuse, YEASTERN will replace it free of charge.

Ver. T0302

4-HB-T20

Address: Rm.2,5F., No.51,Sec.2,Keelung Rd., Xinyi Dist., Taipei city, 110 Taiwan.

Tel: +886-2-2377-6200 **Fax:** +886-2-2377-6300

Email: yb@yb-biotech.com

Copyright® 2020 All rights reserved. Yeastern Biotech Co., Ltd.

YEAtaq II DNA Polymerase

Cat. No.

FYT601-500U

FYT611-500U

YEAtaq II DNA Polymerase

Concentration: 5 U/μl **Storage:** - 20 °C

Description

YEAtaq II DNA Polymerase is a thermostable enzyme derived from from Thermus aquaticus YT-1 strain.The enzyme is in a recombinant form expressed in *E. coli*. It is able to with stand repeated heating to 95°C without significant loss of activity. It possesses both 5'-3' polymerase and exonuclease activity, and has no detectable 3'-5' exonuclease activity. it has a 3' adenylation activity. Thus, the PCR products can be used directly in TA-cloning procedures.

Cat. No.	FYT601-500U	FYT611-500U
YEAtaq II DNA Polymerase (5 U/μl)	100 μl x 1	100 μl x 1
10× Reaction Buffer (with 15 mM Mg^{2+})	1 ml	1 ml
10 mM dNTPs Mix	200 μl	--

Storage Buffer:

20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.1 mM EDTA, 0.5% Tween 20, 1 mM DTT, 50% Glycerol, 0.5% NP-40, Stabilizers.

10× Reaction Buffer:

15 mM $MgCl_2$, Tris-HCl (pH 8.3), $(NH_4)_2SO_4$, KCl

The reaction buffer is supplied as a 10× concentrate and should be diluted before use.

Unit Definition

One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTPs into acid-insoluble material in 30 minutes at 72 °C.

General Reaction Conditions

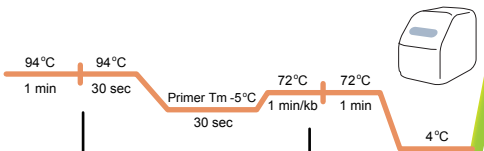
The optimal conditions for the concentration of YEAtaq II DNA polymerase, $MgCl_2$, primers and template DNA depend on the system being utilized, and may need to be determined empirically.

A. Add the following components to a sterile tube on ice

Component	Volume	Final conc.
10× Reaction Buffer	5 μl	1×
10 mM dNTPs mix	1.0 μl	0.2 mM
Primer mix (10 μM each)	1 μl	0.2 μM
Template DNA	0.5-10 μl	0.1-100 ng (typical)
YEAtaq II DNA Polymerase (5 U/μl)	0.5-1 μl	2.5-5 U
ddH_2O	variable	

Total volume 50 μl

B. Suggested cycling parameters for YEAtaq DNA Polymearse



C. Analyze the amplified products by agarose gel electrophoresis and visualize by ethidium bromide staining

Copyright® 2020 All rights reserved. Yeastern Biotech Co., Ltd.