



Catalog #	1609
Synonyms	Taq pol
Type	Recombinant
Source	E. coli
Species	Thermus aquaticus
Tag	His6
Form	50% Glycerol solution + Buffer 10x
Purity	>95% by SDS PAGE
Shipping	Ice pack

Introduction

Our Taq DNA Polymerase is a genetically modified version of wt Taq DNA polymerase optimized for all standard PCR applications. It provides higher sensitivity, longer PCR products and higher yields compared to conventional Taq DNA polymerases. Taq DNA Polymerase could be used with the same cycling conditions as conventional Taq DNA polymerase with minimum optimization. It is supplied with optimized Taq 10x buffer, which includes 20 mM MgCl₂.

Description

Taq DNA polymerase is a highly pure recombinant enzyme with a high processivity. It contains His6 tag and could be efficiently removed for downstream applications. It is supplied with proprietary Taq 10x buffer, which includes KCl, (NH₄)₂SO₄ and 20 mM MgCl₂. The concentration is 5 U/ul. Typical reaction setup (25-45 cycles): Initial denaturation: 95C 1-3 min, Denaturation: 95C 30 s, Annealing: T_m-5C 30 s, Extension*: 72C 1 min, Final Extension: 72C 5-15 min. *The recommended extension time is 1 min for PCR products up to 2 kb. For longer products, the extension time should be prolonged by 1 min/kb.

Application

PCR reactions, PCR labeling - effectively incorporates modified dUTP (Biotin, Digoxigenin, Cy5, Cy3), PCR Mutagenesis, Fill-in reactions, Primer extension, T/A cloning

Purification method

Affinity chromatography

Formulation

Storage buffer: 50mM Tris pH 8.0, 150 mM NaCl, 1 mM DTT, 0.1mM EDTA, 0.5% (v/v) Tween 20, 50% (v/v) glycerol

Specificity

Product overhang: 3'-A

Storage

Store at -20C

For research use only. Not for use in diagnostic procedures.

