

Description: Sequencing Taq DNA Polymerase is a modified enzyme from the thermophilic Eubacterium *Thermus aquaticus*. Due to the modifications in dNTP binding site, the enzyme incorporates dUTP and dideoxynucleotides more efficiently compared to *Taq* DNA Polymerase.

Content

Ref No.	S117005	117005	117025	color
Sequencing Taq DNA Polymerase	Sample size	500 units	2500 units	blue
Complete NH ₄ [*] Reaction Buffer (10x)	1.8 mL	2x 1.8 mL	10x 1.8 mL	yellow
Complete KCl ^{**} Reaction Buffer (10x)	1.8 mL	2x 1.8 mL	10x 1.8 mL	black
MgCl ₂ 100 mM	1 mL	1 mL	5x 1 mL	green
Datasheet	1	1	1	--

* Complete NH₄ Reaction Buffer (10x): pH 8.8, 0.1% Tween 20, 20 mM MgCl₂.

** Complete KCl Reaction Buffer (10x): pH 8.8, 0.1% Tween 20, 15 mM MgCl₂.

Applications: The enzyme is suitable for cycle sequencing, recommended for dUTP/bio-dUTP incorporation reactions.

Concentration: 5 units/μL

Unit definition One unit of activity is the amount of enzyme required to incorporate 10 nmoles of dNTP into acid-insoluble material in 30 minutes at 72 °C.

Sensitivity: --

Additionally provided: 1 tube MgCl₂ (100 mM)

Recommended MgCl₂ concentration: 1.5 mM – 6 mM

Quality Control

- 98% protein homogeneity in 10% SDS-PAGE
- No detectable exo-/endonuclease activities
- PCR amplification tests with different templates

Storage -20°C