Sequencing Taq DNA Polymerase

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 NH_4 Reaction Buffer (10x): pH 8.8, 0.1% Tween 20, 20 mM $MgCl_2$.

** Complete KCl Reaction Buffer (10x): pH 8.8, 0.1% Tween 20, 15 mM $MgCl_2$.

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 $MgCl_2$ (100 mM)

Recommended $MgCl_2$ 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