

KOD DNA Polymerase from *Thermococcus kodakaraensis*, Recombinant

Cat. No. NATE-1632

Lot. No. (See product label)

Introduction

Description

KOD is a high fidelity thermostable DNA polymerase that amplifies target DNA up to 6 kbp with superior accuracy and yield for PCR applications. The enzyme's 3'→5' exonuclease-dependent proofreading activity results in a lower PCR mutation frequency than any other commercially available DNA polymerase. The elongation rate and processivity are 5 times and 10 to 15 times higher, respectively, than for Pfu DNA polymerase, resulting in highly accurate and robust yield, in a short reaction time.

Product Information

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| Species | Thermococcus kodakaraensis |
| Source | E. coli |
| Formulation | 50 mM Tris, pH 8.0, containing 500 mM sodium chloride, 5% glycerol, and 1 mM DTT |
| Purity | > 90% homogeneous by SDS-PAGE |
| Concentration | 2.5 U/μl |
| Optimum pH | 6.5 |
| Optimum temperature | 75°C |
| Unit Definition | One unit of enzyme is defined as the amount of enzyme that will incorporate 10 nmoles of dNTPs into acid insoluble material in 30 minutes at 75°C. |

Storage and Shipping Information

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| Storage | at -20°C |
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