

HotStart Taq DNA Polymerase

Product Information

Cat#	DIA-441
Description	Taq polymerase chemically treated to block activity before heating, preventing low-temperature non-specific amplification. Suitable for high-specificity PCR, multiplex PCR, high-GC content (>60%), and complex genomic amplification. Pre-heating activity inhibited to prevent non-specific amplification, suitable for complex PCR applications.
Unit Definition	One unit (U) is defined as the amount of enzyme required, after heat activation, to incorporate 10 nmol of dNTPs into acid-insoluble material in 30 minutes at 74 °C.
Storage	-20 °C
Contaminants	Free of E. coli DNA residues; free of endo-/exonuclease contamination
Applications	High-specificity PCR; amplification of complex templates; multiplex PCR; genome amplification assays; qPCR.
Product Overview	Product Components: HotStart Taq DNA Polymerase (5 U/μL): 50 μL 5× HS Taq Buffer with Mg²⁺: 1 mL × 2 dNTPs (10 mM each): 200 μL Product Features: Convenient: matches standard hot-start enzyme PCR conditions with no program changes needed High efficiency: minimizes nonspecific bands and smears, ensuring high specificity High sensitivity: amplifies specific gene fragments from as little as 0.05 ng human genomic DNA
Package	250 U