Datasheet for ABIN5519577

TransTaq® DNA Polymerase High Fidelity(HiFi)(with 2.5 mM dNTPs)

Overview

Quantity:	250 units
Application:	Polymerase Chain Reaction (PCR)

Product Details

Purpose:	TransTaq® DNA Polymerase High Fidelity (TransTaq® HiFi DNA Polymerase) contains TransTaq®-T DNA Polymerase and a proofreading 3'-5' exonuclease.
Brand:	TransTaq®
Specificity:	TransTaq® HiFi DNA Polymerase provides higher specificity and higher amplification efficiency than TransTaq®-T DNA Polymerase. Two different buffers are provided in the kit. TransTaq® HiFi Buffer I is optimized for the amplification of genomic DNA and TransTaq® HiFi Buffer II is optimized for the amplification of λDNA, cDNA or plasmid DNA.
Characteristics:	- TransTaq® HiFi DNA Polymerase offers 18-fold fidelity as compared to EasyTaq® DNA Polymerase. - Extension rate is about 1-2 kb/min. - Template-independent "A" can be generated at the 3' end of the PCR product. PCR products can be directly cloned into pEASY®-T vectors. - Amplification of genomic DNA fragment up to 15 kb.
Components:	DNA Polymerase, 10X HiFi Buffer I, 10X HiFi Buffer II, 2.5 mM dNTPs, 10X GC Enhancer, 6X DNA Loading Buffer
Unit Definition:	One unit of TransTaq® HiFi DNA Polymerase incorporates 10 nmol of deoxyribonucleotide into acid-precipitable material in 30 minutes at 74°C.

Application Details

Application Notes:	Complex templates, GC/AT rich templates, Long PCR, High yield PCR
Comment:	TransTaq® HiFi DNA Polymerase has passed the following quality control assays: functional

Application Details

	absence of double- and single-strand endonuclease activity, >99% homogeneous measured by SDS-PAGE. Each batch of TransTaq® HiFi DNA Polymerase has been assayed for amplification efficiency to amplify p53 gene from 10 ng of human genomic DNA
Restrictions:	For Research Use only

Handling

Buffer:	Storage Buffer: 20 mM Tris-HCl (pH 8.0), 0.1 mM EDTA, 1 mM DTT, 100 mM KCl, 50 % glycerol, stabilizers 10xTransTaq® HiFi Buffer:200 mM Tris-HCl (pH 9.0), 100 mM KCl, 100 mM (NH4)2SO4, 20 mM MgSO4, 10 % Glycerol, others
Storage:	-20 °C
Storage Comment:	at -20°C for two years
Expiry Date:	24 months

Publications

Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)