WUHAN HUAMEI BIOTECH CO., LTD.
Postal Address: Wuhan Hi-tech Medical Devices Park, Building B11, #818 Gaoxin Road, Donghu Hi-Tech Development Area, Wuhan, Hubei Province 430206, P.R.China
Website: www.cusabio.com www.cusabio.cn
Email: cusabio@cusabio.com
Tel: +86-27-87582341
Fax: +86-27-87196150

CusaFast Pfu DNA Polymerase

Catalog Number: CSB005B

Package size： 1000Units

Concentration： 2.5U/μl

Storage： Store at –20°C (non-frost-free)

Product Description

CusaPfu DNA Polymerase is a fast and high fidelity DNA polymerase, This enzyme is made by the fusion of a special protein based on common Pfu DNA polymerase through the protein molecular modification technology. It guarantees the high fidelity and at the same time the extending speed is upgraded to 3-4kb/min in PCR process,whichis 4-8 timesthat of ordinary PfuDNA polymerase.It does not exhibit nucleotidyl terminal transferase activity so its amplification products can be directly used for cloning in blunt-ended vectors.

Component

Cusa Fast Pfu DNA Polymerase	400ul
10×Pfu buffer（Mg2+ Plus）	1ml×4
dNTP Mixture（10mM each）	200μl×4
6×loading buffer	1ml×4

Unit Definition

One unit Taq DNA polymerase is defined as the amount of enzyme that incorporates 10 nmol of deoxyribonucleosidetriphosphate into acid precipitable DNA with salmon sperm DNA as template / primer in 30 min at 74°C.

Quality Control

The purity of enzyme is above 97%, evaluated by SDS-PAGE. It's validated to be no exogenous nucleic acid enzymatic activity. There is no residual host cell DNA by PCR detection. Functionally tested in amplification of a single-copy gene fromhuman genomic DNA. No obvious enzyme activity changes observed after storing at room temperature for one week.

Intended Use

1 DNA amplification by Polyermerase Chain Reaction (PCR).
2 High-fidelity DNA amplification, cloning and expression
3 DNA sequencing.
4 Site directed mutagenesis
5 Gene synthesis.

General reaction mixture for PCR (50 μl reaction volume) :

Components	Volume
Template DNA	< 0.5μg
Forward Primer(10μM)	1-2μl
Reverse Primer(10μM)	1-2μl
10×Pfu buffer	5μl
10mM dNTPs	1μl
Cusa Fast Pfu DNA Polymerase	0.5 ~ 1μl
ddH2O to final volume	50μl

WUHAN HUAMEI BIOTECH CO., LTD.
Postal Address: Wuhan Hi-tech Medical Devices Park, Building B11, #818 Gaoxin Road, Donghu Hi-Tech Development Area, Wuhan, Hubei Province 430206, P.R.China
Website: www.cusabio.com www.cusabio.cn
Email: cusabio@cusabio.com
Tel: +86-27-87582341
Fax: +86-27-87196150

PCR Conditions

94℃	2 ~ 5min	
94℃	30sec	28-35cycles
52℃	30sec	
72℃	3-4kb/min	
72℃	5-10min	

Storage Buffer

20 mM Tris-HCl（PH8.0）,1 mM DTT；0.1mM EDTA,100mM KCl,0.5% (v/v) Tween 20,0.5% (v/v) Nonidet P40,50% Glycerol。

Note

1, Keep all reagents on ice until use.

2. For research use only. Not for use in therapeutic or diagnostic procedures.