Uracil-DNA Glycosylase
(UDG)

Product Name	Cat. No.	Size
Uracil-DNA Glycosylase	B-2014	250 Units X 1
	B-2014-1	250 Units X 2
	B-2014-2	250 Units X 4

Package information

B-2014	Uracil-DNA Glycosylase (1 unit/㎕) 250 ㎕

Description

Uracil-DNA Glycosylase catalyzes the hydrolysis of the N-glycosylic bond from uracil-containing single or double-stranded DNA.

Usage Information

- ▣ UDG is active optimum at pH 8.0
- ▣ Does not require a divalent cation
- ▣ Inhibited by high ionic strength
- ▣ Inactivated by heating at 95 ˚C for 5 min

Storage Buffer

20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.5 mM EDTA, 1 mM DTT, 0.5% Tween20, 0.5% NP40, 50% Glycerol

Source

Recombinant *E. coli* strain carrying the over-expressed modified gene of Uracil DNA Glycosylase from *E. coli*.

Definition of Activity Unit

One unit of the enzyme catalyzes the release 1 nmole of uracil from uracil-containing DNA template in 60 min at 37 ˚C.

Applications

- ▣ Control of carry-over contamination in PCR
- ▣ Glycosylase mediated single nucleotide polymorphism detection (GMPD)
- ▣ Site-directed mutagenesis
- ▣ As a probe for protein-DNA interaction studies
- ▣ SNP genotyping
- ▣ Cloning of PCR products
- ▣ Generation of single strand overhangs of PCR products and cDNA

Protocol

1. UDG (1 U/㎕) is added to the total PCR mixture 50 ㎕, and reacted at 50℃ in 3 min
2. (Optional) UDG inactivated at 95 ℃ in 5 min
3. PCR reaction

Required : All the PCR reaction uses dUTP instead of dTTP

◉ Research Use Only
◉ Store at -20℃