

# Uracil-DNA Glycosylase (UDG)

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

## Package information

B-2014	Uracil-DNA Glycosylase (1 unit/ $\mu\text{l}$ ) 250 $\mu\text{l}$
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## 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/ $\mu\text{l}$ ) is added to the total PCR mixture 50  $\mu\text{l}$ , and reacted at 50°C in 3 min
2. (Optional) UDG inactivated at 95 °C in 5 min
3. PCR reaction

Required : All the PCR reaction uses dUTP instead of dTTP

- Research Use Only
- Store at -20°C