# Recombinant UNG/Uracil DNA Glycosilase

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| **Catalog No.** | CSI13874 | **Quantity:** | 2000 U |
| | CSI13875 | | 1 X 10E4 U |
| | CSI13876 | | 2 X 10E4 U |

**Alternate Names:** Uracil DNA Glycosilase, Uracil DNA Glycosylase, UNG.

**Description:** Uracil DNA Glycosilase (UNG) catalyses the release of free Uracil from Uracil-containing DNA. UNG efficiently hydrolyzes uracil from single-stranded or double-stranded DNA, but not from oligomers (6 fewer bases).

**Physical Appearance:** Sterile Filtered colorless solution.

**Source:** *E.coli.*

**Formulation:** UNG solution in 10 mM Tris-Hcl (pH-7.4 at 25°C) + 50 mM KCl + 1 mM DTT + 0.1 mM EDTA +0.1 mg/ml BSA and 50% glycerol.

**Inhibition & Inactivation:** Inactivated by heating at 95°C for 10 min. Enzyme activity is partially restored at temperatures lower than 55°C.

**10X UNG Reaction Buffer:** 200 mM Tris-HCl (pH 8.0 at 25°C) + 10 mM DTT and 10 mM EDTA.

**Specific Activity:** The Specific Activity was found to be 5 U/µl.

**Unit Definition:** 1 Unit of the enzyme catalyzes the release of 1 nanomole of uracil-containing DNA template in 60 min at 37°C

**Reaction Conditions:** 1X UNG Reaction Buffer, incubate at 37°C.
UNG is active over a broad pH range with an optimum at pH-8.0, doesn't require divalent cation, and is inhibited by high ionic strength (>200mM). The abasic sites formed in DNA by UNG may be cleaved by heat, alkali-treatment or endonucleases that cleave specifically at abasic sites.

**Applications:** Glycosilase mediated single nucleotide polymorphism detection (GMPD).
Site-directed mutagenesis.
As a probe for protein-DNA interaction studies.
Rapid and efficient cloning of PCR products.
Elimination carry-over contamination in PCR.

**Storage & Stability:** Uracil DNA Glycosilase although stable at 15°C for 1 week, should be stored desiccated below -18°C.
**Please prevent freeze-thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

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