

# Uracil DNA Glycosylase

**CATALOG NO.:** M1234-1000  
**AMOUNT:** 1000 U (200 µl)  
**CONCENTRATION:** 5 U/µl  
**FORM:** Liquid  
**SOURCE:** Recombinant *E.coli*

**KIT COMPONENTS:**

Components	Volume	Part No.
Uracil DNA Glycosylase (5 U/µl)	200 µl	M1234-1000-1
10X Uracil DNA Glycosylase Reaction Buffer	1.0 ml	M1234-1000-2

**DESCRIPTION:** *E.coli* Uracil DNA Glycosylase (UDG) catalyzes the release of free uracil via hydrolysis of the N-glycosylic bond between the uracil and sugar from uracil containing single or double stranded DNA. This enzyme does not show activity on oligomers of 6 or less bases or on RNA.

**APPLICATIONS:**

- Prevents carry-over contamination in PCR
- Glycosylase mediated polymorphism detection (GMPD)
- Site-directed mutagenesis

**ENZYME STORAGE BUFFER:** 30 mM Tris-HCl (pH 7.5), 150 mM NaCl, 1 mM EDTA, 1 mM DTT, 0.15% Tween-20 and 50% (v/v) Glycerol.

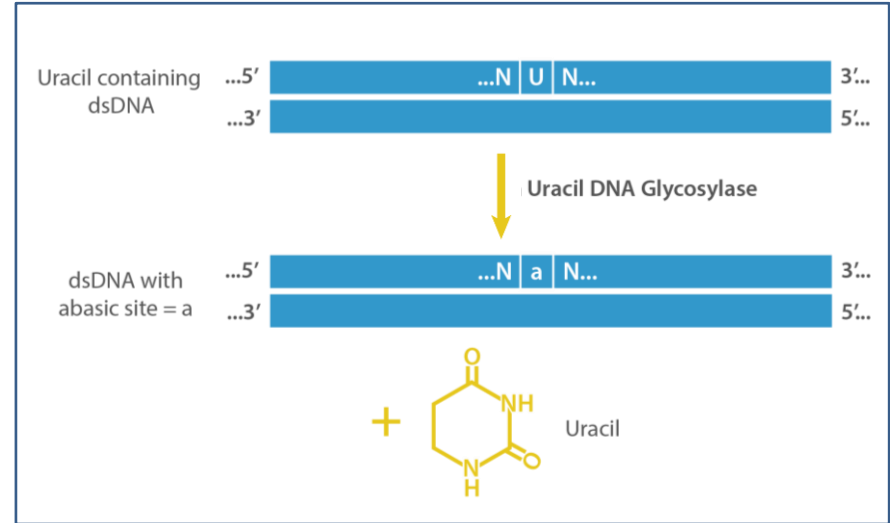
**ENZYME UNIT DEFINITION:** One unit is defined as the amount of Uracil DNA Glycosylase that catalyzes the release of 60 pmol of uracil per one minute from uracil-containing, double-stranded DNA at 37°C.

**10X URACIL DNA GLYCOSYLASE REACTION BUFFER COMPONENTS:** 200 mM Tris-HCl, 10 mM DTT, 10 mM EDTA at pH 8.

**REACTION CONDITIONS:** Use 1 unit of Uracil DNA Glycosylase per 0.1 µg of uracil containing DNA and incubate at 37°C for 10 minutes to make the DNA incapable of being copied by DNA polymerases. Note: Uracil DNA Glycosylase is inhibited by salt concentrations over 200 mM.

**HEAT INACTIVATION:** Incubation at 95°C for 10 minutes to have 95% of the enzyme denatured. To ensure product DNA is not degraded by residual enzyme activity, it is recommended to extract the products with phenol/chloroform or add a Uracil DNA Glycosylase inhibitor.

**STORAGE CONDITIONS:** Store at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for one year from the date of shipping when stored and handled properly.



**RELATED PRODUCTS:**

- RNase III *E.coli* (Cat# M1226-100)
- RNase A (Cat# M1227-25)
- RNase R (Cat# M1228-500)
- RNaseOFF ribonuclease Inhibitor (Cat# M1238-4000)
- DpnI (Cat# M1236-2000)

**FOR RESEARCH USE ONLY! Not to be used on humans.**