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Technical Data Sheet

# **UNG**Uracil-N-Glycosylase RT-0610-03 • RT-0610-15 [300 U] [1500 U]

### **Description**

*E.coli* uracil-DNA glycosylase (UDG or UNG) hydrolyses the release of free uracil from uracil-containing DNA. UDG efficiently hydrolyses single or double-stranded DNA, but not from oligomers (6 or less bases).

The Uracil-N-Glycosylase (UNG) is an enzyme that hydrolyses all single-stranded and double-stranded DNA containing dUTPs. Consequently, if all PCR amplifications are performed in the presence of a dNTPs/dUTP blend, by carrying a UNG step before every run it is possible to get rid of any previous undesired PCR product containing dUTP

#### Source

Purified from *E.coli* expressing the *ung* gene of *E.coli* on a plasmid.

#### Product details and content

Reagent (Catalogue #)	Description
UNG (RT-0610-03)	- 1 tube of 300 µL UNG (1u/µL) - 1 tube of reaction buffer 10x (200 mM Tris-HCl pH8.0, 10 mM EDTA, 10 mM DTT)
UNG (RT-0610-15)	- 1 tube of 1,5 mL UNG (1u/µL) - 5 tubes of reaction buffer 10x (200 mM Tris-HCl pH8.0, 10 mM EDTA, 10 mM DTT)

#### Storage conditions

For long term storage the UNG should be stored at -15  $^{\circ}$ C to -25  $^{\circ}$ C in a constant temperature freezer.

When stored under these conditions the reagents are stable for 2 years.

Avoid repetitive freeze-thaw cycles.

#### **Protocol**

If UNG is required, please add an initial step before the usual cycling protocol: 2 min at 50 °C.

(Hold at 50 °C when the cycling protocol is finished)

## Procedure when using any PCR or qPCR kits containing dUTP

Uracil-N-Glycosylase can be added to a final concentration of 0.01 u/µL: 0.5 µl of 1 u/µl UNG per 50 µl reaction

#### **Unit Definition**

One unit is defined as the amount of enzyme that catalyses the release of 60 pmol of uracil per minute from doublestranded, uracil containing DNA.

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