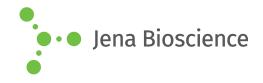
# **DATA SHEET**





# Thermolabile UNG (Uracil N-Glycosylase) - 10 u/μl

UNG (UDG) for preventing carry-over contaminations in PCR assays

Cat. No.	Amount
PCR-427-1KU	1 kilo unit
PCR-427-10KU	10 kilo units
PCR-427-100KU	100 kilo units

Unit Definition: One unit of enzyme catalyzes the degradation of 1  $\mu g$  single-stranded uracil-containing DNA at 37  $^{\circ}\text{C}$  in 60 min.

For general laboratory use.

**Shipping:** shipped on gel packs **Storage Conditions:** store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid

Concentration: 10 unit/µl

## **Description:**

Thermolabile UNG (UDG) is used in real-time PCR to prevent carryover contamination of dU-containing DNA from previous reactions. The enzyme is fully active at temperatures up to 55°C and inactivated above 65°C.

Thermolabile Uracyl N-Glycosylase (UNG, UDG) catalyzes the release of uracil from single and double stranded uracyl-containing DNA. The resulting abasic sites are susceptible to hydrolytic cleavage at elevated temperatures.

An amount of 1 unit UNG completely digests  $10^4$  to  $10^6$  copies of U-containing DNA fragments in 2 min at  $50^{\circ}$ C.

#### Recommended assay:

Use 0.2 units UNG per PCR assay (50 µl volume).

An UNG treatment of 2 min at 50°C at the onset of thermal cycling removes uracil residues from dU-containing DNA and prevents it from serving as template. UNG is completely heat-inactivated at temperatures above 65°C in the following initial denaturation step of the PCR.

#### Content:

10 units/ $\mu$ l UNG in 20 mM Tris-HCl pH 8.0, 50 mM NaCl, 1 mM EDTA, 1 mM DTT, 100  $\mu$ g/ml BSA, 50 % [v/v] Glycerol

## **Related Products:**

qPCR master mixes