DATA SHEET

Jena Bioscience

Thermolabile UNG (Uracil N-Glycosylase) - high conc.

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

Cat. No.	Amount
PCR-428-10KU	10 kilo units
PCR-428-100KU	100 kilo units

Unit Definition: One unit of enzyme catalyzes the degradation of 1 µg single-stranded uracil-containing DNA at 37 °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: 200 units/µl

Description:
Thermolabile UNG - high conc. is recommended for use in freeze drying applications or in applications where only a minimal amount of volume can be used. The remaining glycerol concentration in the final assay is neglectable due to a high dilution factor.
UNG is used in real-time PCR to prevent carry-over contamination of dU-containing DNA from previous reactions. 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°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:
200 units/µl UNG in 20 mM Tris-HCl pH 8.0, 50 mM NaCl, 1 mM EDTA, 1 mM DTT, 100 µg/ml BSA, 50 % [v/v] Glycerol

Related Products:
qPCR master mixes