DATA SHEET

Jena Bioscience

Extreme Thermolabile UNG (Uracil N-Glycosylase)

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

Cat. No.	Amount
PCR-429-1KU	1 kilo unit
PCR-429-10KU	10 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: 1 unit/µl

Description:
Extreme Thermolabile UNG (UDG) is ideal for use in one-step RT-PCR systems to remove contaminations with uracil-containing DNA before onset of the reverse transcription. The enzyme is fully active at temperatures between 15 to 25°C and inactivated at 50°C.
Extreme Thermolabile UNG is a recombinant uracil-DNA glycosylase from marine bacterium BMTU 3346. UNG catalyzes the hydrolysis of the N-glycosidic bond between the uracil and sugar, leaving an apyrimidinic site in uracil-containing single or double-stranded DNA. 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 at 20-25°C before starting the thermal cycling removes uracil residues from dU-containing DNA and prevents it from serving as template. Extreme Thermolabile UNG is completely heat-inactivated at temperatures above 50°C in the following reverse transcription step of the RT-PCR.

Content:
1 units/µl UNG in 20 mM Tris-HCl pH 9.0, 100 mM KCl, 0.1 mM EDTA, stabilizers, 50 % [v/v] Glycerol

Related Products:
qPCR master mixes