

**Thermolabile UNG (Uracil N-Glycosylase) - 1 u/ μ l**

Prevention of carry-over contaminations
UNG, UDG

Cat. No.	Amount
PCR-353	200 units

Unit Definition: One unit of enzyme catalyzes the degradation of 1 μ g 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 (Supplied in 20 mM Tris-HCl pH 8.0, 50 mM NaCl, 1 mM EDTA, 1 mM DTT, 100 μ g/ml BSA and 50 % [v/v] glycerol)

Concentration: 1 unit/ μ l

Description:

Thermolabile UNG is used in real-time PCR to prevent carry-over contamination of dU-containing DNA from previous reactions. Uracil N-Glycosylase (UNG, UDG) catalyzes the release of uracil from single and double stranded uracil-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:

Add 0.2 μ l (0.2 units) UNG for each 50 μ l of master mix and vortex thoroughly. The preparation of a master mix is crucial in quantitative PCR reactions to reduce pipetting errors.

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.

Related Products:

qPCR Core Kits
Dual labeled fluorescent probes
Custom primers