



## Thermolabile UNG (Uracil N-Glycosylase)

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 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 (Supplied in 20 mM Tris-HCl pH 8.0, 50 mM NaCl, 1 mM EDTA, 1 mM DTT, 100 µg/ml BSA and 50 % [v/v] glycerol)

**Concentration:** 1 unit/µl

### 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 µl (0.2 units) UNG for each 50 µl 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