

INSTRUCTIONS FOR USE

Product Name: Uracil DNA Glycosylase (UDG), Heat-Labile, Glycerol-Free

Catalog # UDG01-E29D

Step 1. In a centrifuge tube, add the following components while keeping the reaction:

5 µL (1x)	10× PCR Buffer (Mg ²⁺ Plus)
3 µL (1.5 mM)	25 mM MgCl ₂
3 µL (0.6 mM)	dUTP (10 mM)
1 µL (0.2 mM)	dCTP/dGTP/dATP/dTTP (10 mM each)
X µL	DNA Template
2 µL (0.4 mM)	Forward Primer (10 µM)
2 µL (0.4 mM)	Reverse Primer (10 µM)
0.5 µL (0.05 mM)	Taq DNA Polymerase (5 U/µL)
1 µL (1 U/50µL)	Heat-Labile UDG (1 U/µL)
Up to 50 µL	RNase Free ddH ₂ O

- The concentration of dUTP can be optimized to 0.2-0.6 mM.
- 0.2 mM of dTTP can be added selectively.

Step 2. Run the following thermal cycling settings:

dU-containing template degradation	25°C	10 min	1 cycle
UDG inactivation & Pre-denaturation	94°C	2 min	1 cycle
Denaturation	95°C	10 sec	30-35 cycles
Annealing	60°C	20 sec	
Extension	72°C	30 sec/kb	
Final Extension	72°C	5 min	1 cycle

- The dU-containing template degradation time can be optimized to 5-10 min.