

Uracil-DNA Glycosylase (UNG), Heat-labile

Catlog Number: IEC-HMM-0045

• Basic Information

Source: Recombinant E.coli

Purity: ≥95%

Buffer: 20 mM Tris-HCl (pH 8.0), 0.1 mM EDTA, 100 mM KCl, 1 mM DTT, 0.5% (v/v) Tween-20, 0.5% (v/v) NP-40, 50% (v/v) glycerol

Instructions: 1. Uracil-DNA Glycosylase (UNG), E. coli, is inactivated at 95°C for 10 minutes, but Uracil-DNA Glycosylase (UNG), which is heat-labile, is inactivated at 50°C for 2 minutes.

2. In buffers lacking stabilizers (e.g., PCR buffer: 10 mM Tris-HCl, pH 8.0, 50 mM KCl, 2.5 mM MgCl₂), the enzyme inactivates more rapidly as temperature increases.

3. It is recommended to add 1 U of Uracil-DNA Glycosylase (UNG), heat-labile, to a 50 µL PCR reaction mixture.

4. Uracil-DNA Glycosylase (UNG), heat-labile, exhibits 100% enzyme activity within the temperature range of 15–25°C.

• Applications

Uracil-DNA Glycosylase (UNG), heat-labile, is a recombinant protein derived from psychrophilic marine bacteria, expressed and purified in E. coli. It specifically recognizes uracil residues in single- or double-stranded DNA and hydrolyzes them to release free uracil. It has no activity on RNA. This enzyme is primarily used for contamination prevention in PCR amplification products.

• Specification

1 U/µL

• Storage & Transportation

-20°C

