Uracil DNA Glycosylase (UDG)

Shipping: On Dry/Blue Ice Catalog number

Batch No.: See vial BIO-27044: 500u

Store at –20°C

meridian BIOSCIENCE™

Storage and stability:
Uracil DNA Glycosylase is shipped on dry/blue ice. On arrival store at -20 °C for optimum stability.

Expiry:
When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

Unit Definition: One unit is the amount of enzyme that catalyses the release of 60 pmol of uracil per minute from double stranded, uracil-containing DNA. Activity was measured by release of [^{3}H] -uracil in a 50 mL reaction mix containing 0.2 mg DNA (10^4 -10^5 cpm/mg) in 30 minutes at 37 °C. Safety precautions: Please refer to the material safety data sheet for further information.

Notes:
For research or further manufacturing use only.

Description

Uracil DNA Glycosylase (UDG) catalyzes the release of uracil from uracil-containing single or double-stranded DNA, but not from RNA or oligonucleotides (6 or fewer bases). UDG is active over a broad pH range with an optimum at pH 8.0, does not require a divalent cation, and is inhibited by high ionic strength (>200 mM).

Meridian UDG is purified to SDS-PAGE purity and is free of endonucleases, exonucleases, nickases and RNases.

Source: Recombinant *E. coli* strain carrying the over-expressed modified gene of Uracil DNA Glycosylase from *E. coli.*

Features

- Removal of uracil from uracil-containing DNA
- Novel temperature sensitive mutant irreversibly inactive after heating

Applications

- UDG treatment of uracil-containing DNA to prevent amplification by DNA Polymerases
- Used to investigate features of protein-DNA interactions

Components

Product Name	500 Units
Uracil DNA Glycosylase	500 µL
10x Reaction Buffer	1.2 mL

Reagent Specifications:

10x Reaction Buffer (1 mL): 0.25 M Tris-Cl, 1 mM EDTA, 10 mM DTT, pH 8.0.

Associated Products

Product Name	Pack Size	Cat. No.
dUTP Mix 50 mM	25 µmol (1 x 500 µL)	BIO-39041
dUTP 100 mM	25 µmol (1 x 500 µL)	BIO-39035
IMMOLASE	250 Units	BIO-21046

Citations:

1. Rashtchian, A., *et al.* PCR methods and applications **2(2),** 124 -130 (1992).
2. Stivers, J.T. & Drohat, A.C. Archives of Biochemistry and Biophysics **396(1),** 1-9 (2001).

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