

# Uracil DNA Glycosylase (UDG)

Shipping: On Dry/Blue Ice

Catalog numbers

Batch No.: See vial

BIO-27044: 500u



A Meridian Life Science® Company

Store at -20°C

## 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 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 [<sup>3</sup>H]-uracil in a 50ml reaction mix containing 0.2mg DNA (10<sup>4</sup>-10<sup>5</sup> cpm/mg) in 30 minutes at 37 °C.

## Safety precautions:

Please refer to the material safety data sheet for further information.

## Quality control specifications:

Bioline operates under ISO 9001 Management System. Uracil DNA Glycosylase is extensively tested for activity prior to release.

## Notes:

Research 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 (>200mM).

Bioline 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	500µl
10x Reaction Buffer	1.2ml

## Reagent Specifications:

10x Reaction Buffer (1ml):

0.25M Tris-Cl, 1mM EDTA, 10mM DTT, pH 8.0.

## Associated products

Product Name	Pack size	Cat. No.
dUTP Mix 50mM	25µmol (1 x 500µl)	BIO-39041
dUTP 100mM	25µmol (1 x 250µl)	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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