



Product Insert

Uracil DNA Glycosylase (UDG)

Catalogue Number:
BIO-27044 500 Units

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

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 overexpressed modified gene of Uracil DNA Glycosylase from *E. coli*.

Components

Uracil DNA Glycosylase	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.

Product Specifications

Batch details:

Volume: 0.5ml
Concentration: 1u/µl
Batch No: See vial

Storage Buffer:

20mM Tris-Cl, pH 8.0, 0.1M NaCl, 0.1mM EDTA, 1mM DTT, 0.1% stabilizer and 50% glycerol.

Storage Conditions:

Uracil-DNA Glycosylase can be stored for 24 months at -20°C.

Shipping Conditions:

On Dry Ice or Blue Ice

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
Accusure	250 Units	BIO-21068

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 [³H]-uracil in a 50µl reaction mix containing 0.2µg DNA (10⁴-10⁵ cpm/µg) in 30 minutes at 37 °C.

Product 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).

Notes

1. This product insert is a declaration of analysis at the time of manufacture.
2. Research use only.

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