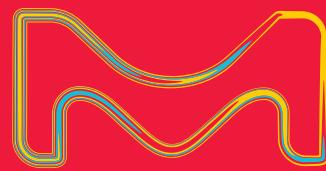


E.coli UDG

Product Number: UDGEC



Product Description

E.coli uracil-DNA glycosylase (UDG) is obtained from the expression and multi-step purification of the recombinant *E.coli* strain cloned with *E.coli* UDG gene. *E.coli* UDG catalyzes the release of uracil from uracil-containing DNA. UDG can efficiently hydrolyze uracil on single- or double-stranded DNA but cannot hydrolyze uracil from oligonucleotides of 6 bases or less.

Components

Components	UDGEC-500U	UDGEC-5000U
<i>E.coli</i> UDG (5 U/μl)	100 μl	1 mL

Storage Buffer

10 mM Tris-HCl, pH7.4@25°C

50mM KCl

0.1 mM EDTA

1 mM DTT

0.1mg/ml BSA

50% Glycerol (v/v)

Storage

Store at -30 ~ -15°C and transport at ≤ 0°C

Unit Definition

The amount of enzyme required to catalyze the release of 60 pmol of uracil from uracil-containing double-stranded DNA per minute is defined as 1 U. Activity was determined by measuring the amount of [³H]-uracil released from a 50 μl reaction system containing 0.2 μg DNA within 30 min at 37°C.

Notes

For research use only. Not for use in diagnostic procedures.

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Experiment Process

Reaction System

ddH ₂ O	To 50 μl
10 x Taq Buffer (with 20 mM MgCl ₂)	5 μl
dUTP ^a	0.6 mM
DATP/dCTP/dGTP	0.2 mM each
Template DNA	optional
Primer1 (10μM)	2 μl
Primer2 (10μM)	2 μl
Taq DNA Polymerase (5 U/μl)	0.5 μl
<i>E. coli</i> UDG (5 U/μl) ^b	0.2 μl

a) According to experimental needs, the final concentration of dUTP can be adjusted between 0.2 - 0.6mM.

b) According to experimental needs, the amount of 50 μl reaction system is generally 0.1 - 1 U.

▲ According to experimental needs, the final concentration of MgCl can be adjusted between 2 - 3 mM.

Reaction System

37°C	10 min	Degradation of uracil-containing templates
95°C	2 min	UDG inactivation, template denaturation
PCR		
94°C	30 sec	
55°C	30 sec	
72°C	60 sec/kb	
72°C	7 min	Fully extention

▲ According to the experimental needs, the PRC reaction program can be adjusted.

