

DATA QUALITY SHEET



Uracil-DNA glycosylase

FOR RESEARCH USE ONLY

Cat. GC-038-0100, GC-038-0250, GC-038-0500, GC-038-1000, GC-038-5000

DESCRIPTION	E. coli uracil-DNA glycosylase (UDG) is the recombinant form of the enzyme, which catalyzes the release of free uracil from uracil-containing DNA (U-DNA) and creates an alkali-sensitive apyrimidinic site in the DNA. UDG efficiently hydrolyzes uracil from single-stranded or double-stranded U-DNA, but not from oligomers (6 or fewer bases).
APPLICATION	PCR RT-PCR site-directed mutagenesis as a probe for protein-DNA interaction studies producing highly labeled oligonucleotide probes
CONCENTRATION	5 units/ μ l
UNIT DEFINITION	One unit of enzyme activity is the amount that catalyzes the degradation of 1 μ g single-stranded uracil-containing DNA at 37°C in 60 minutes.
STORAGE BUFFER	20 mM Tris-HCl pH 8.0; 100 mM NaCl; 0.1 mM EDTA; 1 mM DTT; 0.1 mg/ml BSA; 50% glycerol
10X REACTION BUFFER	500 mM Tricine pH 8.5, 10 mM MgCl ₂ or buffer for PCR or RT-PCR protocol
STORAGE TEMPERATURE	Store at -20°C in a constant temperature freezer.
QUALITY CONTROL	Activity, SDS-PAGE purity, absence of endonucleases/nickases and exonucleases.
FUNCTIONAL ANALYSIS	Tested functionally in a unit activity test.