PR1MA™ Cod Uracil-DNA Glycosylase

Eliminate amplicon contamination

Contents

Cod Uracil-DNA Glycosylase is provided at a concentration of 50 U/uL.

Background

Cod Uracil-DNA Glycosylase (cUNG) is a recombinant, thermolabile enzyme that removes uracil from DNA. It is ideal for preventing carry-over contamination during RNA or DNA amplification reactions that substitute dUTP for dTTP. cUNG is the only commercially available UDG enzyme that is completely and irreversibly inactivated by moderate heat treatment, unlike bacterial versions of the enzyme. Cod UDG treatment in combination with targeted pre-amplification using dUTP provides a simple and efficient solution to eliminate carry-over contamination and the generation of false positives and inaccurate quantification.

Enzyme Features

- Heat-labile, completely and irreversibly inactivated at 55˚C
- cUNG makes contamination control possible in PCR and other amplification methods
- Does not degrade product post-PCR, enabling downstream use of the amplicon
- High purity enzyme, tested free of contaminating nucleases

Application Notes

Thermolabile cUNG when used in combination with targeted pre-amplification using dUTP can eliminate carry-over contamination and the generation of false positives and inaccurate quantification for PCR-based amplification technologies.

**These products are intended for research use only, not for diagnostic use. The safety and efficacy of these products in diagnostic or other clinical uses has not been established.*

Shipping & Storage

- cUNG is supplied in a buffer containing 50% glycerol, 50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Tween-20, pH 7.5.
- Can be supplied in a glycerol-free/custom buffer
- cUNG is shipped on blue ice. On arrival, store at -20°C for optimum stability. Repeated freeze/thaw cycles should be avoided.

Quality Control

- cUNG activity: A known cUNG is used to create a standard curve with a real-time molecular beacon assay against which the activity of this enzyme is measured.
- Purity: >95% as determined by SDS-PAGE analysis
- cUNG is free of detectable RNase, DNase (exo- and endonuclease)
- <0.05 ng contaminating host DNA per 1.25 U

PCR Amplification Reactions with cUNG

- Prior to setting up a PCR reaction, thaw all reaction components
- Setting up reaction on ice (4°C) is highly recommended
- Ensure that you use dNTP mixes containing dUTP in your experiments
- Add 1 U cUNG directly to your 20 uL PCR reaction
- Pre-incubate for 5 minutes at room temperature