PCR decontamination kit

Rapid removal of contaminating DNA in PCR mastermixes, without reduction in PCR sensitivity

The PCR decontamination kit uses a dsDNase to remove contaminating DNA from mastermixes. The double-strand specific property allows decontamination in the presence of primers and probe.The dsDNase is irreversibly inactivated by heating to 60°C in the presence of DTT, ensuring that DNA template added to the mastermix after inactivation will not be digested. The mastermix can be used immediately after decontamination to run PCR reactions. AMPIGENE® Taq polymerases have been treated to remove host DNA and additional clean-up is not necessary. The PCR decontamination kit is recommended for decontamination of primers or competitor's PCR mixes.

Polymerases used in PCR are frequently contaminated with *E. coli* DNA. Contaminating DNA may cause reduced sensitivity and false positives when small amounts of bacterial DNA are targeted. Other sources of contamination might be dNTPs, buffer components and primers / probes, as well as DNA introduced during handling. The PCR decontamination kit is an easy method to eliminate DNA contamination.

Citations: 1 View Online »

Ordering Information

Order Online »

ENZ-KIT137-0100	100Reactions

Manuals, SDS & CofA

View Online »

- Removes DNA contamination from PCR mastermixes
- Improves target detection by reducing background
- Does not effect PCR sensitivity
- Optimized for PCR and probe based qPCR mixes

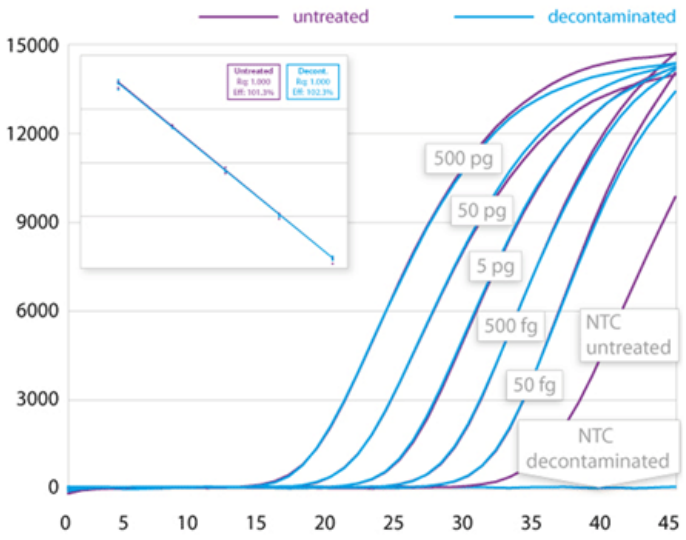


Fig 2. Untreated and decontaminated qPCR 2x master mix was used for analysis of an E. coli gDNA 10-fold serial dilution with 5 steps. NTC samples were included, and all plots of the serial dilution show an average of three replicates. Inset: Standard curves calculated from Cq values obtained from analysis of serial dilution.

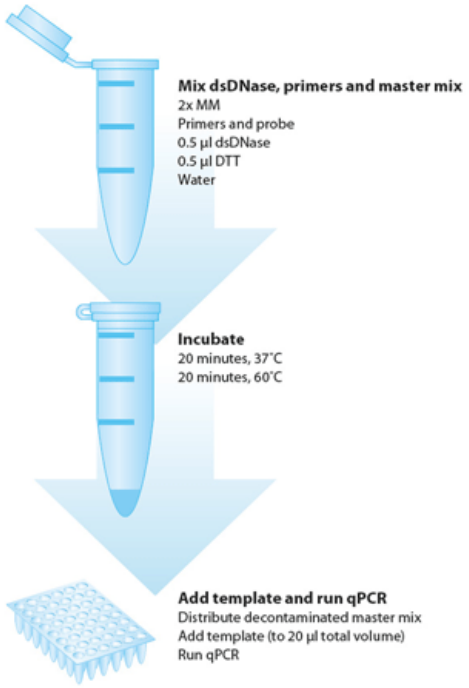


Fig 3. Simple workflow for decontamination

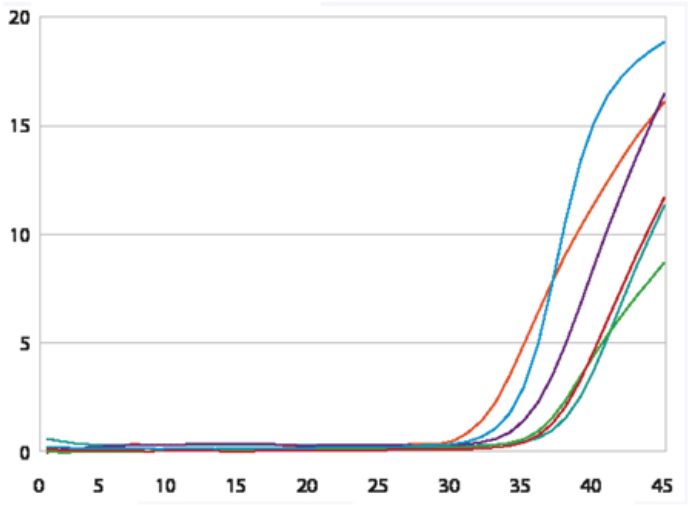


Fig 1. The presence of E. coli 23S DNA in 2x probe master mixes from various suppliers was quantified by using water as template (NTC) and following the manufacturer's instructions. The figure shows plots acquired from several separate experiments. Traces of E. coli 23S DNA were found in all master mixes tested, with Cq values generally ranging from 30 – 35.

Handling & Storage

Short Term Storage -20°C

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Application Notes

For the removal of contaminating DNA from primers and mastermixes prior to PCR.

Contents

Heat-labile dsDNase
DTT

Technical Info / Product Notes

The PCR decontamination kit is not recommended for use with high fidelity PCR buffers. High fidelity PCR buffers typically contain high salt concentration, low magnesium concentration, and high pH which reduce the activity of dsDNase.

UniProt ID

C9YSL6_PANBO

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