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Zymo OneStep PCR Inhibitor Removal Kit

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GEMS - Genomic Enviro...



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Protocol status: Working

We use this protocol and it's working

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Keywords: PCR, PCR inhibitor removal, Purification, zymo onestep pcr inhibitor removal kit feature, efficient removal of polyphenolic compound, sample cleanup, contaminants from dna, most impure dna, efficient removal, rna preparation, downstream enzymatic reactions such as pcr, free of enzymatic inhibitor, high quality dna, pcr, enzymatic inhibitor, impure sample, contaminant, fulvic acid, including polyphenolic, dna, rna, removal

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Abstract

Features:

- For high quality DNA or RNA that is free of enzymatic inhibitors including polyphenolics, humic/fulvic acids, tannins, melanin, etc.
- Fast, one-step procedure for “cleaning” impure samples prior to PCR, sequencing, RT, etc.

Description:

The OneStep™ PCR Inhibitor Removal Kit contains all the components needed to efficiently remove contaminants from DNA/RNA preparations that can inhibit downstream enzymatic reactions such as PCR and RT. The column matrix has been specifically designed for efficient removal of polyphenolic compounds, humic/fulvic acids, tannins, melanin, etc. from most impure DNA and RNA preparations. Sample cleanup is as simple as: applying, spinning and recovering a sample from the column.

The steps and abstract for this protocol consist entirely of the manufacturer's instructions with no deviations, as per https://files.zymoresearch.com/protocols/_d6030_onestep_pcr_inhibitor_removal_kit.pdf.

Materials

 Zymo OneStep PCR Inhibitor Removal Kit **Zymo Research Catalog #D6030**

Total cost per sample:

£0.5

Approximate time needed per sample:

<10 minutes



Column Preparation

- 1 Insert column into a Collection Tube.

**Please note that matrix in the column may appear dehydrated, or powdery. This is normal.*

- 2 Open the cap, add 600 µl of Prep-Solution and centrifuge at 8,000 x g for 3 minutes.

- 3 Inhibitor Removal:

Transfer the prepared column to a clean 1.5 ml microcentrifuge tube. Add 50 - 200 µl DNA or RNA (in water, TE, or similar) to the Zymo-Spin™ III-HRC Column and centrifuge at 16,000 x g for 3 minutes.

The filtered DNA (or RNA) is suitable for PCR, (RT), and other downstream applications.

Protocol references

Zymo Research Version 2.0.2-last update, *OneStep™ PCR Inhibitor Removal Kit Cat. No. D6030 (50 spin columns/purifications) Protocol*.

Available: https://files.zymoresearch.com/protocols/_d6030_onestep_pcr_inhibitor_removal_kit.pdf [2024, October 3].