

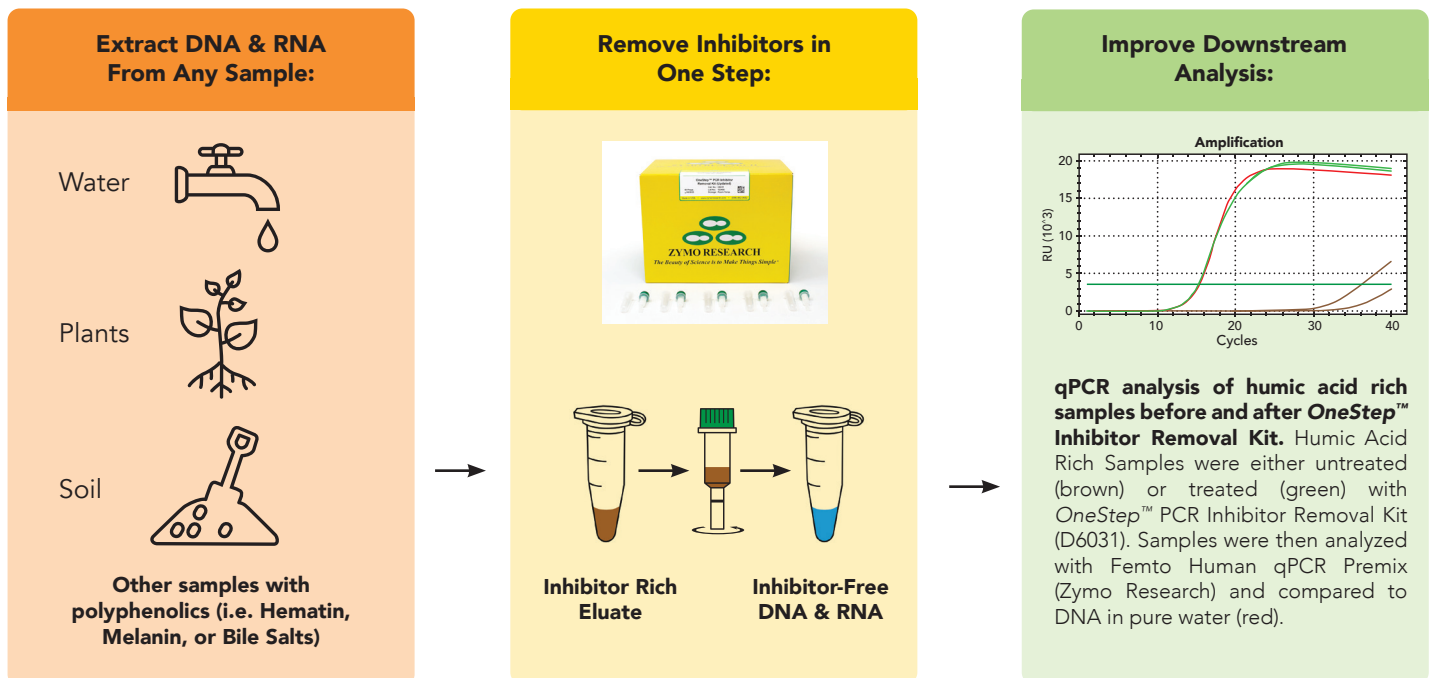


PCR Inhibitor Removal from DNA & RNA in just One Step!

OneStep™ PCR Inhibitor Removal Kit

- **Quick & Easy Workflow:** One step procedure for cleaning inhibitor rich DNA & RNA.
- **Robust Inhibitor Removal:** Efficiently eliminate polyphenolics, such as humic/fulvic acids, tannins, and melanin from extracted DNA & RNA samples for PCR & NGS.
- **High DNA & RNA Yields:** $\geq 80\%$ recovery of PCR inhibitor-free DNA & RNA.

Achieve Inhibitor-Free DNA & RNA in less than 5 min.



info@zymoresearch.com

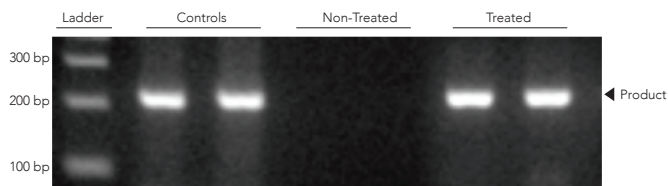


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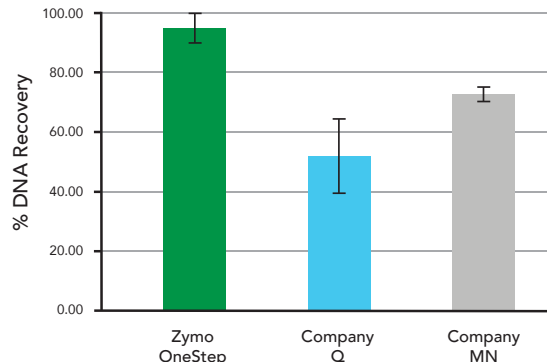
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Successfully Amplify DNA From Samples Containing PCR Inhibitors



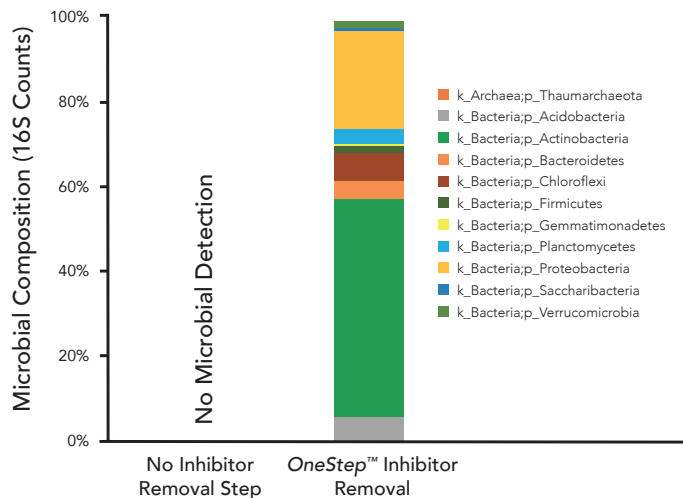
Amplification of a 200bp product from DNA containing Humic Acid is restored after treatment with the OneStep™ Kit. PCR amplification was completely inhibited in the case of the “non-treated” sample. In each case equal amounts of DNA were used for each PCR and equivalent amounts of the reactions were then analyzed in a 2.0% (w/v) agarose/TAE/EtBr gel. The ladder is a 100 bp DNA marker (Zymo Research). Hot start PCR was performed using ZymoTaq PreMix (Zymo Research).

Minimize DNA & RNA Loss During Inhibitor Removal



Comparison of DNA Recovery after PCR inhibitor removal using the OneStep™ Kit or Competitors. 1kb ladder (Zymo Research) was diluted to various concentrations and treated with either the OneStep™ PCR Inhibitor Removal Kit or kits from Company Q or Company MN. DNA concentration was measured using Nanodrop (Thermo) or Qubit (Thermo) for lower concentrations and % recovery was calculated for each kit.

Obtain NGS Data from Inhibitor Rich Samples



Microbes are successfully detected in DNA extracted from soil using 16S sequencing following treatment with the OneStep™ Kit. DNA samples were extracted from soil using the Quick-DNA Fecal/Soil Microbe kit (Cat # D6010) and eluted in 100 µl. 50 µl of each eluate was either treated or not treated with the OneStep™ PCR Inhibitor Removal Kit. 16s rRNA sequencing was performed on two DNA samples from each group. The taxonomy bar plot represents the phyla of the microbes present in the samples. Samples that did not undergo any inhibitor removal step failed microbe detection.

Product	Cat. No.	Size
OneStep™ PCR Inhibitor Removal Kit	D6031 D6035	50 preps 2 x 96 preps