

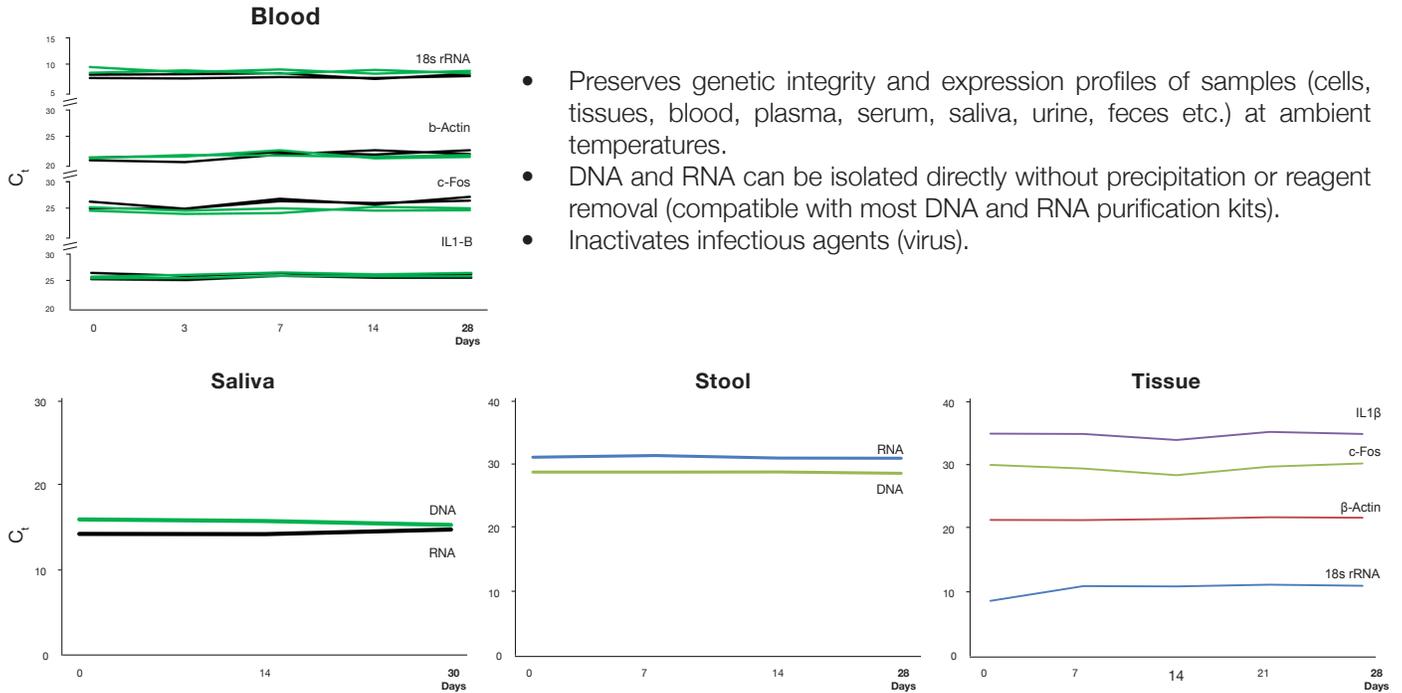
Collect. Preserve. Discover.



Innovative Sample Collection &
Stabilization for Nucleic Acid Analysis

DNA/RNA Shield™

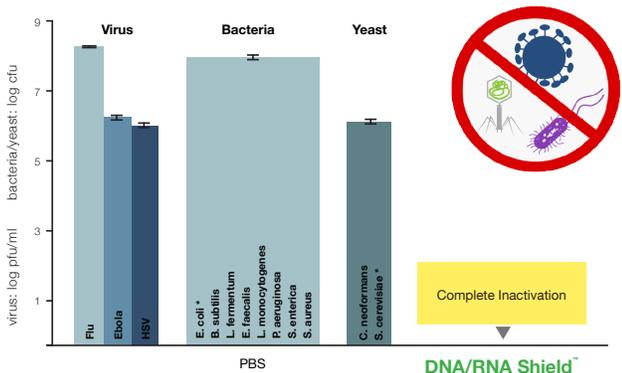
Nucleic acid stabilization at ambient temperature



- Preserves genetic integrity and expression profiles of samples (cells, tissues, blood, plasma, serum, saliva, urine, feces etc.) at ambient temperatures.
- DNA and RNA can be isolated directly without precipitation or reagent removal (compatible with most DNA and RNA purification kits).
- Inactivates infectious agents (virus).

RNA in blood, saliva, stool and tissue is effectively stabilized in DNA/RNA Shield™ at ambient temperature. Graphs show: cellular RNA from human whole blood and spike-in DNA and RNA controls from saliva, stool and tissue purified at the indicated time points and analyzed by (RT)qPCR. Controls: HSV-1 and HIV (AcroMetrix, Life Technologies).

Microbial Inactivation



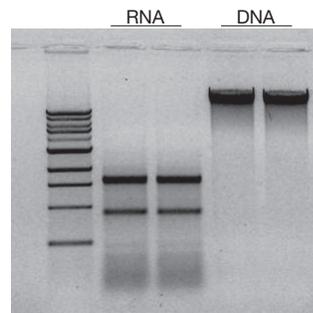
Viruses, bacteria and yeast are effectively inactivated by DNA/RNA Shield™. Samples containing the infectious agent (virus, bacteria, yeast) were treated with DNA/RNA Shield™ or mock (PBS) treated for 5 minutes. Titer (PFU) was subsequently determined by plaque assay. **Validated by:** Influenza A - D. Poole and Prof. A. Mehle, Department of Medical Microbiology and Immunology, University of Wisconsin, Madison; Ebola (Kikwit) - L. Avena and Dr. A. Griffiths, Department of Virology and Immunology, Texas Biomedical Research Institute; HSV-1/2 - H. Oh, F. Diaz and Prof. D. Knipe, Virology Program, Harvard Medical School; E. coli, L. fermentum, B. subtilis, S. cerevisiae - Zymo Research Corporation)

*Disclaimer: This graph only displays results from E. coli inactivation. Each microbe was tested independently and were combined into one graph for brevity. Bacterial cultures were grown between 10⁸ - 10⁹ cells and yeast cultures were grown between 10⁷ - 10⁹ cells.

Streamlined Purification

Samples in DNA/RNA Shield™ can be input directly into most off-the-shelf purification kits, without the removal of the reagent, including:

- **Quick-DNA™ Universal** (D4068), **Quick-RNA™** (R1057)
- **ZR-Duet DNA/RNA™** (D7003), **ZymoBIOMICS™ DNA Mini Kit** (D4300)



High quality DNA and RNA is effectively purified from blood stored in DNA/RNA Shield™ using the Quick-gDNA™ and Quick-RNA™ kits from Zymo Research respectively. High molecular weight DNA was intact with no apparent degradation. Also, RNA was high quality, DNA-free and included small RNAs when purified from DNA/RNA Shield™. This was not the case using another supplier's product (data not shown).

Break the Cold Chain
Not the bank!



Transport at ambient temperatures

Learn more

To learn more about DNA/RNA Shield™, visit www.zymoresearch.com/shield

Blood Collection Tube

- Evacuated blood tube (16x100 mm) filled with 6 mL of DNA/RNA Shield™ for the direct collection of 3 mL whole-blood (human or animal).



R1150-6-T	DNA/RNA Shield™ - Blood Collection Tube
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Fecal Collection Tube

- 15 mL container (prefilled with 9 mL DNA/RNA Shield™) for the direct collection of up to 1 gram and/or 1 ml stool. Collection spoon is included in the container screwcap.



R1100-9-T	DNA/RNA Shield™ - Fecal Collection Tube
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Microbial/Tissue Lysis Tube

- 2 mL collection tube (prefilled with 1 mL DNA/RNA Shield™) and Bashing Beads for the collection and homogenization of microbial or tissue samples.



R1100-1-B15	Lysis Tube (Microbe)
R1100-1-B2	Lysis Tube (Tissue)

Swab and Collection Tube

- 5 mL screwcap container (12x80mm) filled with 1 mL DNA/RNA Shield™ and a sterile HydraFlock® swab for specimen collection.



R1100-1-ST	DNA/RNA Shield™ - Swab & Collection Tube
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HydraFlock® is a registered trademark of Puritan

Urine Conditioning Buffer (UCB)

- Ensures nucleic acid stability in urine during sample storage/transport at ambient temperatures. There is no need for refrigeration or specialized equipment. UCB™ can be added to any urine collection device.



D3061-1-140	Urine Conditioning Buffer
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DNA/RNA Shield™ Reagent

- All-purpose reagent for sample lysis and stabilization of DNA/RNA in tissues (e.g., mammalian biopsy, whole insect), cells (animal, microbial) and biological liquids.
- Reagent concentrate (2X) for use with biological liquids at 1:1 ratio.



R1100-50	DNA/RNA Shield™
R1100-250	DNA/RNA Shield™
R1200-25	DNA/RNA Shield™ (2x concentrate)
R1200-125	DNA/RNA Shield™ (2x concentrate)
R1100-1-T	DNA/RNA Shield™ - Collection Tube

Innovation. Pure & Simple.™

Since its inception in 1994, Zymo Research has been proudly serving the scientific community by providing innovative, reliable, and high quality research tools at affordable prices. Our vision... “The Beauty of Science is to Make Things Simple” is now truer than ever. Whether it’s epigenetics, DNA, RNA, E. coli, or yeast based research, our philosophy remains the same: To provide the highest quality products in the industry while ensuring they are both simple to use and reliable in their performance.

Zymo Research stands on three pillars which form the foundation of our company: Innovation, Quality, and Customer Service. These pillars are fundamental to our culture and ensure our products meet your needs.

Innovation

Zymo Research is historically recognized for its innovation of high quality nucleic acid purification technologies. Under the branding DNA Purification Made Simple™ and RNA Purification Made Simple™, our technologies are pushing the limits of what is possible with nucleic acid isolation. As The Epigenetics Company™, Zymo Research has also received much attention for its rapidly expanding portfolio of epigenetics products and services. It is our objective to develop and provide the most comprehensive set of tools for DNA, RNA, and epigenetic research and analysis available today. Thousands of peer-reviewed scientific publications from researchers around the world feature our technologies. Through innovation, our scientists have made streamlined DNA methylation detection possible, pioneered the micro-elution column for DNA and RNA purification, developed the simplest and the most sophisticated methods for high-quality plasmid DNA purification, and patented the first RNA purification directly from Trizol® without phase separation among many other leading technologies in the industry.

Quality

We are committed to quality and guarantee that all of our products and service will meet and exceed your expectations. Our products are constantly evaluated by scientists like you to help ensure their reliability and the highest standard of quality.

Customer Service

We strive for excellence in how we support your scientific endeavors. We pledge to be honest and responsible for everything we do with you. We will treat you as we would like to be treated. Together, we will build a brighter future.