

# DNA/RNA Shield™

**Catalog Nos:** R1100-50 (50 ml) R1100-250 (250 ml)  
 R1200-25 (25 ml) 2X concentrate  
 R1200-125 (125 ml) 2X concentrate

**Storage:** Room Temperature

## DNA/RNA Purification

Purify samples in DNA/RNA Shield™ directly with Zymo's DNA or RNA purification kits. Bind, wash, and then elute the DNA and/or RNA.

### Trademarks and Disclaimers

™ Trademarks of Zymo Research Corporation. Some technologies included in this product are patent pending.



## Features

- ✓ Preserves genetic integrity and expression profiles of samples (*cells, tissues, blood, biological liquids, stool, 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, bacteria, yeast*).

## Description

DNA/RNA Shield™ ensures nucleic acid stability during sample storage/transport at ambient temperatures. There is no need for refrigeration or specialized equipment. DNA/RNA Shield™ effectively lyses cells and inactivates nucleases and infectious agents (virus), and it is compatible with various collection and storage devices (vacuum tubes, swabs, nasal, buccal, fecal, etc.).

## Instructions for Sample Storage

In an appropriate tube or collection device, add DNA/RNA Shield™ according to the instructions below and homogenize:

Product	Recommended usage
<b>DNA/RNA Shield™</b> R1100-50 (50 ml) R1100-250 (250 ml)	<b>All samples</b> (cells, tissue, swabs, stool <i>etc.</i> )  Samples should not exceed 10% (v/v).
<b>DNA/RNA Shield™</b> 2X concentrate R1200-25 (25 ml) R1200-125 (125 ml)	<b>Blood &amp; other liquid samples</b>  Mix an equal volume reagent and sample.

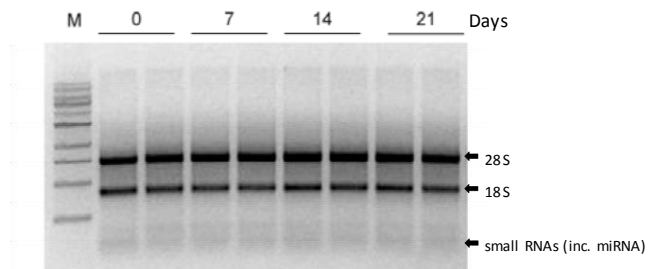
Store and/or transport samples in DNA/RNA Shield™ for later purification of high-quality DNA and/or RNA.

Temperature	Time
4°C - 25°C (ambient)	Up to 30 days
37°C	Up to 3 days
-20°C and below	>1 year

	Product	Size	Cat. No.
RNA	Quick-RNA™ Kits	50 preps 200 preps	R 1050, R 1054, R 1057 R 1051, R 1055, R 1058
DNA	Quick-DNA™ Universal Kits	50 preps 200 preps	D4068 D4069
DNA & RNA	ZR-Duet™ Kit	50 preps	D7001

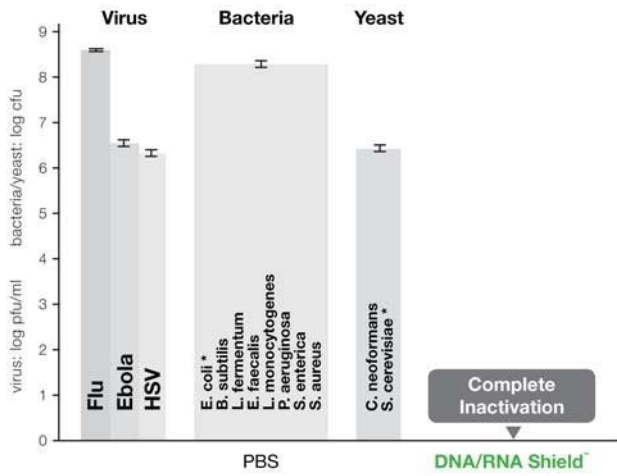
Samples in DNA/RNA Shield™ can also be processed with other commercially available DNA and RNA purification kits.

## DNA/RNA Preservation



RNA from cells is effectively stabilized in DNA/RNA Shield™ at ambient temperature. Data show RNA from human cells (HCT 116) purified at the indicated time points and visualized on agarose gel.

## 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 was subsequently determined by plaque assay (PFU) or growth assay (CFU). 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. Kribe, Virology Program, Harvard Medical School; E. coli\*, B. subtilis, L. fermentum, E. faecalis, L. monocytogenes, P. aeruginosa, S. enteric, S. aureus, C. neoformans, S. cerevisiae\* – Zymo Research Corporation). Bacterial and yeast sample inputs were 10<sup>8</sup>-10<sup>9</sup> and 10<sup>7</sup>-10<sup>8</sup>, respectively.

This product is for research use only and should only be used by trained professionals. It is not intended for use in diagnostic applications. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your research institution or facility. DNA/RNA Shield™ is available for OEM and integration into sample collection technologies.

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