

# DNA/RNA Shield™ Blood Collection Tube

Catalog No. R1150

## Quick Protocol



### Description

The DNA/RNA Shield™ Blood Collection Tube ensures sample stability during storage/transport at ambient temperatures without the need for refrigeration or specialized equipment. DNA/RNA Shield™ reagent effectively lyses samples and inactivates pathogens (e.g., viruses, bacteria).

The nucleic acids (DNA & RNA) in samples are preserved at ambient temperature (DNA up to 2 years, RNA up to 1 month). Samples in the DNA/RNA Shield™ can be frozen (-20/-80°C) for prolonged storage.

### Required Blood Collection Accessories (Not included)

1. Blood collection set
2. A vacuum tube needle holder must be used to ensure proper function.
3. A "Discard Tube" if the DNA/RNA Shield™ Blood Collection Tube is the only tube being drawn.
4. Labels for identification of samples.
5. Alcohol swab.
6. Dry sterile gauze.
7. Tourniquet.
8. Needle disposal container for used needle or needle/holder combination.

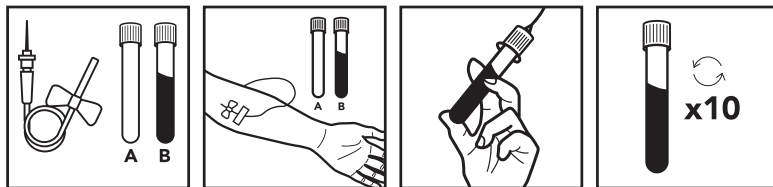
Draw Order:  
Tube A - Discard Tube  
Tube B - DNA/RNA Shield Blood Tube

### Instructions

1. Ensure the blood collection tube is at 18–25°C before use and properly labeled with specimen identification.
2. If the DNA/RNA Shield™ Blood Collection Tube is the only tube to be drawn, blood should be drawn first into a "Discard Tube" to prime the blood collection set. The DNA/RNA Shield™ Blood Collection Tube should be the last tube drawn into.
3. Allow at least 10 seconds for a complete blood draw to take place. Ensure that the blood has stopped flowing into the tube before removing the blood collection tube from the holder.
4. Immediately after blood collection, gently invert the tube 10 times to ensure homogenization.
5. Samples are now stabilized, ready for transport or immediate purification of DNA and/or RNA.

### Sample Purification

Samples in DNA/RNA Shield™ can be input directly into Zymo Research's (and others) nucleic acid purification kits.

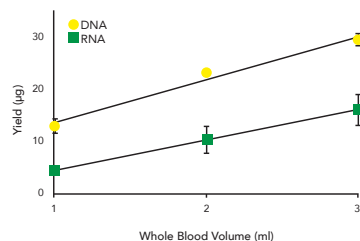


# Complete Your Workflow

## Quick-DNA/RNA™ Blood Tube Kit (R1151)

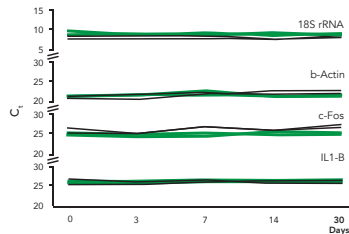
- ✓ **Protection:** Worry-free blood sample storage at ambient temperatures > 30 days.
- ✓ **Streamlined:** No reagent removal (no pelleting) - Direct sample processing.
- ✓ **Superior Yields:** Recover DNA and/or total RNA (including small/micro RNAs) without sample loss.
- ✓ **High-Quality:** RNA is ready for all downstream applications including Next-Gen Sequencing, RT-PCR, etc. DNase I Included.

Highest Yields



Linear recovery of DNA and RNA using the Quick-DNA/RNA Blood Tube Kit. Aliquots (1-3 ml) of whole blood stored in DNA/RNA Shield™ were used for purification and the total DNA/RNA yield measured (n=3).

Nucleic Acid Stabilization at Ambient Temperature



RNA in blood is effectively stabilized in DNA/RNA Shield™ at ambient temperature. Graph shows cellular RNA from human whole blood stabilized in DNA/RNA Shield™ at the indicated time points and analyzed by RT-qPCR.

# Frequently Asked Questions

## What is the reagent concentration in the DNA/RNA Shield™ Blood Collection Tube?

The blood vacuum tube contains 6 mL of DNA/RNA Shield™ 1.5X.

## Can the different components of blood be separated for analysis after collection?

No, blood must be analyzed as a whole sample after collection due to the lytic properties of DNA/RNA Shield™. To analyze different blood fractions, please separate them before stabilizing with the reagent.

## What should I do after collecting a complete blood draw?

After each collection, gently invert the collection tubes 10 times to ensure the sample is evenly mixed with the reagent.

## Can the blood collection tubes be frozen?

Yes, the blood collection tubes can be frozen at any time. Thaw them thoroughly before processing.

## What sample sources are compatible with this collection device? Is this collection tube compatible with anticoagulants?

Fresh or anti-coagulated whole blood samples are compatible with this collection device.

Product	Cat. No.	Size	Sample Input
Quick-DNA/RNA™ Blood Tube Kit	R1151	50preps	Up to 3ml Whole Blood

For questions not covered here, please reach out to technical support via email at [techsupport@zymoreresearch.com](mailto:techsupport@zymoreresearch.com) or by calling 1-888-882-9682