

Tech Note – Treating Samples with RNastable for Shipping/Archiving at Room Temperature

RNastable, from Biomatrix®, is a unique reagent that preserves RNA samples at room temperature. RNastable allows for long-term stabilization of RNA samples with easy sample recovery by simply adding water. RNA integrity does not decrease during room temperature storage of RNA samples. The protocol below is for individual RNastable tubes. RNastable comes in different formats, so please visit the link at the bottom of the page for more information.

Protocol for preserving RNA samples in RNastable:

1. Determine the concentration of your RNA samples.
2. Do not exceed 100 µg of RNA or a maximum volume of 100 µl per tube of RNastable.
3. Open the tube of RNastable, and gently pipet your RNA sample into the RNastable tube.
4. Mix the sample via gentle pipetting.
5. Samples can dried overnight in a laminar flow hood.
6. Faster drying times can be achieved by using a vacuum with no heat.
7. Approximate drying times in a vacuum:
 - a. 10 µl -20 µl, 30 minutes
 - b. >20 µl -30 µl, 1 hour
 - c. >30 µl -100 µl, 1.5 hours
8. Some notes on how samples look after drying:
 - a. If RNA has salt contamination, then this will appear as a white pellet.
 - b. Pellets can appear clear, yellowish, or purplish.
9. Once dry, cover samples and store in a bag with dessicant. Samples are now stable at room temperature.

Protocol for recovering samples preserved in RNastable:

1. Add an appropriate amount of RNase-free water.
2. Leave sample at room temperature for 15 min.
3. Mix the sample via gentle pipetting.
4. RNA samples are now ready to be used directly in downstream applications.

Reference:

https://www.biomatrix.com/downloads/FINAL_RNastable_Handbook.pdf