



Q&A ATCC® Excellence in Research Webinar “Assessing Novel Storage Techniques and Their Ability to Stabilize Nucleic Acids”

General Questions

1. Will we be able to download the presentation?

This presentation will be available to watch on demand [here](#).

Product Questions

2. Does ATCC currently sell stabilizer materials? If so, what are the components of the solutions?

For this study we primarily used Biomatrixa and IntegenX off-the-shelf products to stabilize our DNA and RNA materials. As such, the composition of the materials is proprietary.

3. What type of tubes does ATCC recommended for the storage and stabilization of nucleic acids? Do these tubes prevent surface binding of nucleic acids?

For most applications standard cryovials have worked well for us, however when we start pushing the envelope towards more quantitative approaches or start dealing with increasingly dilute samples we have found that low binding “slick tubes” have proved highly beneficial.

4. Does ATCC sell slick tubes? How are these tubes different than micro-tubes?

ATCC does not sell slick tubes. We purchased ours from VWR.

Product Use Questions

5. When using stabilizer solutions, should the nucleic acid preparation be in dried or liquid format?

Our material started out in a liquid format and we tested dried end-product versions with both the IntegenX and Biomatrixa as well as a liquid version from Biomatrixa (formulated particularly for DNA). Our final format (liquid or dried) will be dependent on the product and intended use.

6. What buffer is recommended for stabilizing nucleic acids in liquid format?

We have been using water. We did not perform any specific studies evaluating the impact of various buffers.

7. Do the stabilizers interfere with down-stream applications, such as PCR or genome sequencing studies? Has ATCC used the stabilized nucleic acids in multiplex assays?

We have tested the end products in standard, qPCR, qRT-PCR, digital PCR and have not seen any interference thus far. We have not tested them in a true multiplex environment but we have several assays that we can assess. Additionally, both companies have performed more studies, which you can find on their websites.

8. Have you sequenced stabilized nucleic acids to show that the stabilizer does not cause base pair damage?

No, we have not analyzed the material at that level yet, but we will.

9. Will ATCC be evaluating the use of stabilizers with other biological materials, such as proteins, viruses, bacteria, fungi, protists, or mammalian cells?

Given the success we've seen in the nucleic acid realm we have been looking at other applications (including all of the products mentioned above) with additional proof-of-concept studies already underway.

10. Has ATCC reviewed the use of FTA paper?

FTA[®] is an acronym for fast technology for analysis of nucleic acids, and yes, we routinely use FTA paper for a number of applications at ATCC and continue to evaluate the most appropriate format given a particular product line and its downstream application.