

Tech Note – Treating Samples with RNAlater® for Long Term Preservation of RNA Integrity

RNAlater® Stabilization Solution is a very effective product for preserving RNA integrity during long term storage prior to isolating total RNA. If we are going to isolate RNA for you, then you might consider treating your tissue/cell samples with RNAlater® prior to shipping. The key to successful RNAlater® treatment is to allow the solution to fully penetrate your sample prior to storage/shipping at -20C or below.

Protocol:

1. For large tissue samples – ensure that no single dimension exceeds 0.5cm.
2. For cultured cells – simply pellet the cells and remove the supernatant.
3. For other samples types, please see the RNAlater® protocol referenced below.
4. Add 5-10 volumes of RNAlater® to your sample.
5. Place in the refrigerator overnight.
6. Remove the excess RNAlater®, and store samples at -20 or -80C for long term storage.
7. Storage guidelines - RNA integrity is preserved in most samples:
 - a. Indefinitely at -20 or -80C
 - b. For 1 month at 4C.
 - c. For 1 week at ambient temperature.
 - d. For 1 day at 37C.

Reference:

<https://tools.thermofisher.com/content/sfs/manuals/7020M.pdf>