

Protocol RNA Stabilization in Harvested Animal Tissues

1. Cut the animal tissue sample into slices less than 5mm thick, as quickly as possible.
2. Completely immerse the tissue pieces in the collection vessel containing RNaseLag.

Note: Make sure to use the appropriate volume of RNaseLag, so weight your sample before starting the procedure and use 10 μ l RNaseLag per 1mg of tissue.

3. The sample is ready for archival storage at conditions shown in Table 4.
4. After storage, for RNA isolation continue with appropriate protocol for the chosen sample type.

Table 1. Storage conditions and procedures after RNaseLag treatment.

Storage condition	Protocol
2–8°C	Incubate the prepared sample (in RNaseLag) for up to 4 weeks at 2–8°C.
15–25°C	Incubate the prepared sample (in RNaseLag) for up to 7 days at 15–25°C.
37°C	Incubate the prepared sample (in RNaseLag) for up to 1 days at 37°C.
–20°C	First incubate the prepared sample (in the RNaseLag) overnight at 2–8°C. Then transfer it to –20°C for storage.
–80°C	First incubate the prepared sample (in the RNaseLag) at 2–8°C. Then remove the tissue from the reagent, and transfer it to –80°C for long storage.

Protocol RNA Stabilization in Harvested Bacterial Cells

Process

1. Calculate the required volume of bacterial culture (refer to Appendix 4).
2. Add 2 volumes of RNaseLag into a tube
3. Add 1 volume of bacterial culture to the tube. Mix by vortexing for 5 sec.
Incubate at room temperature (15–25°C) for 5 min.
4. Centrifuge for 10 min at 4000 rpm at universal centrifuge.
Note: Sometimes the pellet is too clear to be recognized, it is due to RNaseLag treatment, and will not affect the ongoing process.
5. Decant the supernatant.

Pellets can be stored at –20 to –30 °C for up to 2 weeks or at –70 °C for up to one month. For RNA isolation, thaw pellets at room temperature (15–25 °C) and proceed the appropriate RNA isolation protocol.