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RNA stabilization with RNAlater protocol

Last updated: 05/2011 by Collin Closek

*Modified from Sigma and Qiagen RNAlater protocols)

1. Pour 5-10* volumes of RNAlater into an Eppie or Falcon tube (e.g. 5ml of reagent per 1mg of tissue), leaving enough room in the tube for expansion during freezing.

*Note: 5:1 (RNAlater:tissue) is standard in most company guidelines, but Qiagen states >10 volumes of RNAlater is best.

2. Tissue should be immediately placed into the tube containing RNAlater.

Note: The tissue should have little residual water to not dilute the reagent and be fully submerged in the RNAlater to stabilize the RNA.

3. Cap and invert/mix tube for 30seconds or until the RNAlater appears murky.

4. Place tube with sample fully submerged in RNAlater at 4C overnight*

*Note: RNAlater should be allowed to penetrate the tissue at 4C overnight or longer.

5. After 4C incubation, transfer tube to -20C for longterm storage

= Tissue is stable in RNAlater for 1 month at 4C and indefinitely at -20C =