

RNA Sample Stabilization and Recovery Quick Reference Protocol 1.5 ml Screw-Cap Tube and 96-well Plate

RNAstable™ preserves RNA samples at room temperature. Each tube or plate contains RNAstable as a coating at the bottom of the tube or well, which protects picogram to microgram amounts of RNA. This medium is completely dissolvable and ensures total sample recovery.

Stabilize for Storage

- Open cap on tube or remove seal from 96-well plate.
- Add up to 100 μl [$\leq 100 \mu\text{g}$] of the RNA sample directly into each tube or well.
- Leave tube open to dry overnight in laminar flow hood.
- For volumes $\geq 20 \mu\text{l}$, or for accelerated drying, please SpeedVac **without heat**.

SpeedVac® Drying Time	
Sample Volume	Drying Time
10-20 μl	30 minutes
$\geq 20 \mu\text{l}$ -30 μl	1 hour
$\geq 30 \mu\text{l}$ -100 μl	1.5 hours

- Once dried, cap tube or seal 96-well plate, place in the moisture-barrier bag, and reseal for **storage on your benchtop for up to 1 month** at room temperature (15-25°C) with $\leq 50\%$ relative humidity.
- **For long-term storage >1 month**, you may either store the dried samples in a desiccating chamber, or heat seal the moisture-barrier bag containing the dried samples and a desiccant pack. Store at room temperature (15-25°C) with $\leq 50\%$ relative humidity. (Additional sets of 12 sample pouches with desiccant packs are available from www.biomatrica.com, catalog # 14001-087.)

Sample Recovery: Just Add Water

- Add 10-100 μl of H₂O or other liquid to the tube or well containing stored sample.
- Hydrate for 15 minutes.
- Pipette gently to ensure complete mixing.

Samples can be used directly in downstream applications:

- qRT-PCR
- Bioanalyzer and microarray analysis
- End-point PCR and gel analysis
- cDNA synthesis
- Reverse transcription