

Sample Stabilization and Recovery Quick Reference Protocol

1.5-ml Flip-Cap Tube, 96-well and 384-well Plate

For sample recovery, see reverse.

DNAstable® stabilizes purified DNA samples at room temperature. Each tube or plate contains DNAstable as a coating at the bottom of the tube or well, which protects picogram to microgram amounts of DNA. This medium is completely dissolvable and ensures total sample recovery.

Stabilize for Storage

- Open tube or remove seal from 96-well plate.
- Add 1-20 μl of purified DNA sample directly into each tube or well and mix with gentle pipetting
- Place tube or plate to dry in a laminar flow hood or SpeedVac following the time guideline tables below. For volumes >20 µl or for accelerated drying of all volumes, SpeedVac samples at the lowest temperature setting (25-30°C)
- Longer drying times are preferable to ensure complete sample drying.
 Completely dried samples should not feel sticky or tacky when tapped with a sterile pipette tip.
- · Cap tube or cover plate with adhesive seals after removing backing.
- · Store at room temperature (15-25°C) and protect from moisture by either:
 - 1) Storing in a dry storage cabinet or
 - Heat seal the moisture barrier bag, enclosing the dried sample and desiccant packet.
- Dry storage cabinets and additional moisture-barrier bags are available at www.biomatrica.com.

Minimal Drying Times (hours) in a Laminar Flow Hood*

Sample Volume (µl)	Tube	96-well plate	384-well plate
5	4	4	8
6-10	6	6	12
11-20	12	8	24
21-50	28	18	48
51-100	56	24	68
101-125	72	24	78

^{*}Drying times may vary depending on the humidity level in the laboratory. Recommended drying times were determined at 50% relative humidity (RH). Typical HVAC controlled facilities have 40-50% RH.

Minimal Drying Times (minutes) in a SpeedVac at Low Temperature (25-30°C)**

Sample Volume (µl)	Tube	96-well plate	384-well plate
5	10	15	80
6-10	15	15	120
11-20	30	30	180
21-50	45	90	360
51-125	60	150	_
126-150	75	180	_

^{**}Drying times may vary depending on model and condition of SpeedVac and vacuum pump used.

Sample Recovery: Just Add Water

- Add 10-100 μI of H₂O or other liquid to the tube or well containing stored sample.
- · Incubate for 15 minutes.
- Pipette gently to ensure complete mixing. Use directly in downstream application.
- · It is not necessary to further purify rehydrated samples.
- Rehydrated samples can be re-dried without loss of efficient sample stabilization. We do not recommend repeating the rehydration- drying process more than (3) times.

Samples can be used directly in downstream applications:

- PCR
- gPCR (see handbook for details on dilution factors)
- Sequencing
- STR Analysis
- · Whole Genome Amplification
- · Restriction Analysis
- Transformation
- Cloning

For more information, please refer to the DNAstable handbook at www.biomatrica.com.

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