



**DNA**  
gard™

**Tissues & Cells**  
**Quick Reference Protocol**  
50-ml, 100-ml bottle

## Protocol for Tissue Stabilization

DNAgard™ stabilizes DNA in tissues and cells at room temperature. The aqueous storage reagent permeates cellular structures and membranes to stabilize and protect DNA.

### Stabilization for Shipping or Storage

- **Prepare tissue samples by dissection.**
- **Submerge tissue fragment in 500  $\mu$ l** (at least 100  $\mu$ l per 10 mg of tissue is required) DNAgard solution for shipment or storage (For optimal DNA protection, store tissue fragments less than 75 mg, thinly sliced).

*Note: If sample is to be shipped, it is important to select a tube size that ensures that the tissue remains submerged during handling.*

- **Store samples at room temperature** and protected from light for at least 6 months.

### Sample Recovery:

For ease of use, we recommend **removing the DNAgard solution** from the tissue fragment prior to DNA isolation.

**Take care to avoid pipetting off tissue fragments.** Process the tissue fragment for DNA isolation according to the kit manufacturer's instructions or using standard organic extraction methods.

**However, for optimal DNA yield recovery,** we recommend isolating genomic DNA from the entire DNAgard sample (please refer to the DNAgard handbook at [www.biomatrica.com](http://www.biomatrica.com)).

### Technical Assistance:

Biomatrica, Inc. takes pride in providing efficient quality technical support.

Technical Service Department:

Phone: USA (866) DRY-MTRX or (866) 379-6879

Web: [www.biomatrica.com](http://www.biomatrica.com)

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## Protocol for Mammalian Cell Stabilization

### Stabilization for Shipping or Storage

- **Pellet cells at 3500xg** for 1-2 minutes in a microcentrifuge. Remove supernatant.
- **Add a minimum of 100  $\mu$ l of DNAgard solution for every 10<sup>6</sup> cells** (Preferably, use screw cap tubes to avoid spillage). Pulse-vortex samples to resuspend pellet. If the cell suspension in DNAgard is too viscous to pipet, then add more DNAgard solution. Avoid adding excessive amounts of DNAgard, as this will increase the volumes of reagents required for DNA recovery.
- **Store samples at room temperature** and protected from light for 6 months.

### Sample Recovery:

**Do not use organic extraction methods** for DNA isolation (i.e. phenol-chloroform extraction).

Follow one of the protocols below:

- **Column purification protocols allowing DNA isolation from cells resuspended in buffer or medium:**

In this case, DNAgard can be treated as if it were any resuspension buffer or media. Follow manufacturer's instructions for DNA isolation, adhering to reagent ratio specifications.

OR

- **Using column purification protocols that do not specify DNA isolation from cells resuspended in buffer or medium:**

Do not pellet the DNAgard-cell suspension (genomic DNA from cells is released into the DNAgard solution during storage).

Simply add the kit's initial lysis buffer in a 1:1 ratio with the DNAgard volume. Adjust all other reagents as necessary based on this initial volume (proceed as if mixture was entirely kit lysis buffer) and process according to the kit specifications.

**For more information, please refer to the DNAgard Tissue Handbook at [www.biomatrica.com/dnagardtissue.php](http://www.biomatrica.com/dnagardtissue.php)**