



## Sample Stabilization and Recovery Quick Reference Protocol 1.7-ml Tube and 96-well Plate

**CloneStable™** stabilizes unpurified bacterial plasmid and genomic DNA at room temperature for long-term storage and shipping. Provided as a coating at the bottom of each tube or well, CloneStable is completely dissolvable to ensure total sample recovery.

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CloneStable can be used for *E. coli* cells in log or stationary phase cells, and at densities up to  $OD_{600} = 4.0$ .

*E. coli* cells are viable for  $\approx 30$  days if stored in CloneStable. If non-viable cells are needed for storage  $\leq 30$  days, lyse samples at  $80^\circ\text{C}$  for 5 minutes before proceeding with the CloneStable protocol.

### Stabilize Samples for Storage

1. Open cap on tube or remove seal from 96-well plate.
2. Add 5–20  $\mu\text{l}$  of an *E. coli* cell culture into each tube or well. Leave tube or plate open in laminar flow hood overnight to dry samples completely. To accelerate drying, SpeedVac **without heat** for up to 1 hour.
3. Once dried, cap tube or seal plate (aluminum seal provided) and place in moisture-barrier bag or desiccating chamber for storage.
4. Samples can be stored on your benchtop at room temperature (between  $15\text{--}25^\circ\text{C}$ ) at  $\leq 50\%$  relative humidity.

### Sample Recovery

1. Add 5–50  $\mu\text{l}$  of  $\text{H}_2\text{O}$  to the tube or well containing stored sample.
2. Hydrate for 5–10 minutes.
3. Pipette gently to ensure sample mixing.  
**Note:** For plasmid recovery, transform the stabilized sample after rehydration (see the CloneStable handbook).
4. Sample can be used directly in downstream applications such as PCR, transformation, and restriction analysis.

**For stabilization of glycerol stocks, see reverse.**

For more information, please refer to the CloneStable handbook at [www.biomatrica.com](http://www.biomatrica.com).



Glycerol stocks can be transferred to CloneStable for storage or shipping for a period of up to 3 months.

### **Stabilize Glycerol Stocks for Storage**

1. Thaw glycerol stock and spin down cells at 6,000 x g for 2 minutes. Remove supernatant. Stocks with >50% glycerol must be diluted with water so supernatant and cells can separate.
2. Resuspend cell pellet in water to  $OD_{600} = 2.0$ .
3. Add 5–10  $\mu$ l of the resuspended pellet to CloneStable. If non-viable cells are needed for storage  $\leq 30$  days, lyse samples at 80°C for 5 minutes before proceeding with the CloneStable protocol.
4. Leave tube or plate open in laminar flow hood overnight to dry samples completely. To accelerate drying, SpeedVac **without heat** for up to 1 hour.
5. Once dried, cap tube or seal plate (aluminum seal provided) and place in moisture-barrier bag or desiccating chamber for storage.
6. Samples can be stored on your benchtop at room temperature (between 15–25°C) at  $\leq 50\%$  relative humidity.

**For sample recovery protocol, see reverse.**

For more information, please refer to the CloneStable handbook at [www.biomatrica.com](http://www.biomatrica.com).