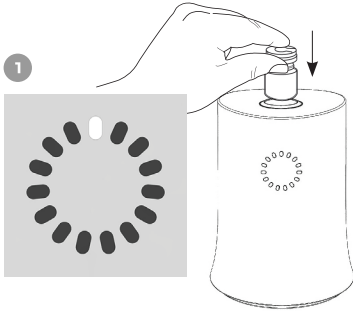


ThawSTAR® AT10

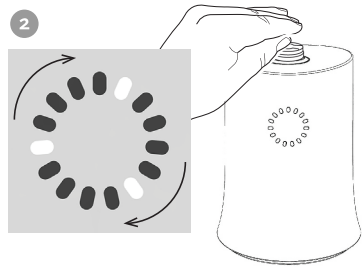
Quick Start Guide

Quick Start

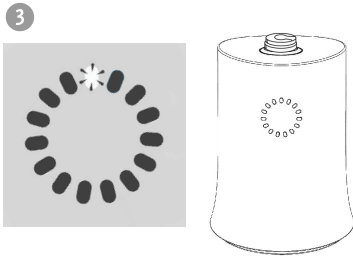
Upon power-up of instrument, please allow 15 minutes for instrument warm-up.



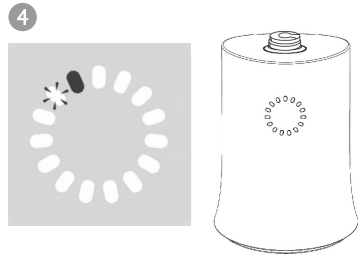
Unit is warmed up and in "ready" state. Vertically insert a clean, tightly capped frozen 10 mL AT-Closed Vial® (below -70°C) into the opening on the top of the instrument.



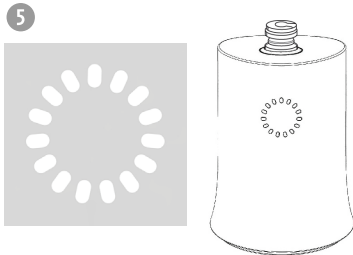
Push the top of the vial down gently until the instrument emits a deep dual tone. The vial will now remain in a depressed position.



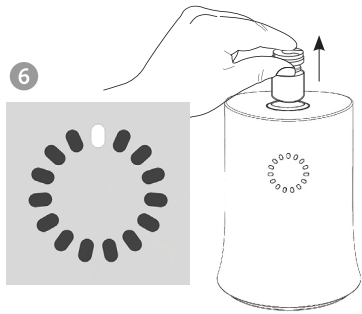
Unit begins countdown when vial load is detected. The total thaw time is calculated for the vial load detected by customized algorithms.



Countdown of the last 10 seconds of the thawing process begins.

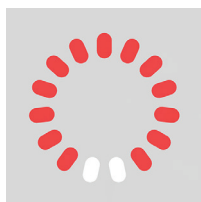


Upon thaw completion, the vial is raised approximately 1 cm (0.4 in).



Remove vial immediately and gently swirl vial contents until remaining ice melts to equilibrate the solution to final thaw temperature.

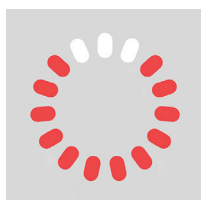
Error Codes

**Error Code 2:**

Failure to warm up properly; or other mechanical fault in the heating system.

Solution:

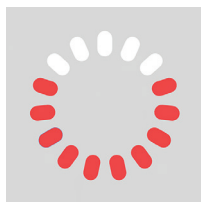
Check power source connection at back of instrument, cable connection to power adapter and the plug connection to the electrical outlet. Turn the instrument off and back on. If the instrument displays the same error code 2, contact BioLife Solutions technical support.

**Error Code 3:**

Vial too warm and/or already thawed.

Solution:

Gently remove vial that is too warm. Instrument will return to "ready" state and display a single light at the top.

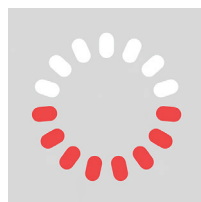
**Error Code 5:**

Vial cannot be seated properly (e.g. too wide, too short, etc.).

Solution:

Gently remove the vial. Instrument will return to "ready" state and display a single light at the top. (1) Check for blockage in the vial grasping

mechanism. Invert instrument to gently remove obstructions, if any. (2) Ensure thermal pads lining the internal heating blocks are intact and undamaged. (3) Ensure vial is within specifications outlined in the instructions for use, section 1.5.

**Error Code 7:**

"Abandoned" vial left in instrument more than 15 seconds after thawing process is completed.

Solution:

Gently remove vial. Instrument will emit a single tone. Instrument will return to "ready" state and display a single light at the top.

**Error Code 9:**

Vial fails to rise after thaw process is finished.

Solution:

Grasp the vial cap only with fingers and rock vial gently to dislodge and remove from opening, taking care not to open the cap. Instrument will return to "ready" state and display a

single light at the top. Ensure thermal pads lining the internal heating blocks are intact and undamaged. *Note: If thermal pads are not intact and/or damaged, contact BioLife Solutions technical support. Avoid sticking forceps or other foreign objects into the opening.*