



Product Sheet

# *Echinamoeba thermanum* (ATCC® PRA-13™)

Please read this **FIRST**



## Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

## Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Echinamoeba thermanum* (ATCC® PRA-13™)

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## Description

**Strain Designation:** OSB1

**Deposited Name:** *Echinamoeba thermanum* Baumgartner et al.

**Depositor:** KO Stetter, M Baumgartner

**Isolation:**

hot spring

Wyoming, United States

**Isolation date:** June, 1995

## Propagation

### Growth Conditions

**Temperature:** 50.0°C

**Growth conditions:** Grown with *Rhodobacter* sp., strain OSrt, ATCC BAA-867

### Medium

ATCC® Medium 2338: *Echinamoeba* broth

ATCC® Medium 2338: *Echinamoeba* broth

ATCC® Medium 2339: *Echinamoeba* agar

### Instructions for Complete Medium

ATCC medium 2338 inoculated with *Rhodobacter* sp. (ATCC® BAA-867).

### Culture Maintenance

Subculture every week to fresh bacterized medium in the following manner:

1. For a plate culture, transfer cells with an inoculating loop to a fresh plate of previously-bacterized agar medium from a growing culture at or near peak density. For a broth culture, inoculate a fresh flask of previously-bacterized broth medium with 0.5 ml from a growing culture at or near peak density.
2. Incubate at 50°C. Keep the cap tightly sealed in the case of a flask culture.

## Cryopreservation

### Cryoprotective Solution

DMSO	1.5 ml
Fresh growth medium w/o bacteria	8.5 ml

1. Mix the components in the order listed. When the medium is added to the DMSO the solution will warm up due to chemical heat.
2. Harvest cells from a culture that is at or near peak density by filtration and centrifugation at 800 x g for 5 min.
3. Adjust the concentration of cells at least  $2 \times 10^6$ /ml in fresh medium.
4. Mix the cell preparation and the cryoprotective solution in equal portions.
5. Dispense in 0.5 ml aliquots into 1.0 - 2.0 ml sterile plastic screw-capped cryovials (special plastic vials for cryopreservation).
6. Place vials in a controlled rate freezing unit. From room temperature cool at  $-1^\circ\text{C}/\text{min}$  to  $-40^\circ\text{C}$ . If freezing unit can compensate for the heat of fusion, maintain rate at  $-1^\circ\text{C}/\text{min}$  through heat of fusion. At  $-40^\circ\text{C}$  plunge ampules into liquid nitrogen. Alternatively, place the vials in a Nalgene  $1^\circ\text{C}$  freezing apparatus. Place the apparatus at  $-80^\circ\text{C}$  for 1.5 to 2 hours and then plunge ampules into liquid nitrogen. (The cooling rate in this apparatus is approximately  $-1^\circ\text{C}/\text{min}$ .)
7. Ampules are stored in either the vapor or liquid phase of a nitrogen refrigerator.
8. To establish a culture from the frozen state place the vial in a  $35^\circ\text{C}$  water bath. Immerse the vial to a level just above the surface of the frozen material. Do not agitate the vial. Immediately after thawing, do not leave in water bath, aseptically remove the contents of the ampule and inoculate into a T-25 tissue culture flask containing 10 ml bacterized ATCC medium 2338. Screw the cap on tightly and incubate the culture at  $50^\circ\text{C}$ . Alternatively, add the thawed contents of the ampule to the surface of a previously-bacterized Petri plate of ATCC medium 2338 agar. Wrap the plate culture with parafilm and incubate upright at  $50^\circ\text{C}$ .
9. Follow the protocol for maintenance of culture.

## References



Product Sheet

## *Echinamoeba therrmarum* (ATCC® PRA-13™)

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If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Echinamoeba therrmarum* (ATCC® PRA-13™)

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).



### Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

### ATCC Warranty

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

### Disclaimers

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