



Product Sheet

# *Neoparamoeba pemaquidensis* (ATCC®) 30735™

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: *Neoparamoeba pemaquidensis* (ATCC® 30735™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

**Strain Designation:** CH-27  
**Deposited Name:** *Paramoeba pemaquidensis* Page  
**Depositor:** TK Sawyer  
**Isolation:**  
Chincoteague Bay, VA, 1971

## Notes

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org). While every effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures. ATCC recommends that individuals contemplating commercial use of any culture first contact the originating investigator to negotiate an agreement. Third party distribution of this culture is discouraged, since this practice has resulted in the unintentional spreading of contaminated cultures.

## Propagation

### Growth Conditions

**Max Temperature:** 25.0°C  
**Min Temperature:** 22.0°C  
Duration: grown with *Oceanospirillum* sp.

### Medium

ATCC® Medium 994: Marine amoeba medium

### Instructions for Complete Medium

ATCC Medium 994

### Culture Maintenance

1. Streak an ATCC medium 994 plate with *Klebsiella pneumoniae* (ATCC® 700831) and incubate at 35°C overnight.
2. Remove an agar block (~5 mm<sup>2</sup>) with trophozoites from the edge of an agar plate culture and invert the block at the edge of the freshly bacterized plate.
3. Wrap the entire edge of the plate with Parafilm, place upright in a moist-chamber, and incubate at 25°C.
4. Repeat steps 1-3 at 10-14 d intervals.

Note: a monoxenic amoeba culture can be established in this manner using any suitable bacterial food source.

## Cryopreservation

1. To detach trophozoites from the plate, flush the surface with 5 ml filtered artificial seawater. Rub the surface of the plate with a spread bar to detach adhering amoebae.
2. Transfer the liquid medium to a sterile centrifuge tube.
3. If the cell concentration does not exceed  $2 \times 10^6$  cells/ml adjust the suspension to that concentration. To adjust the concentration, centrifuge at 600 x g for 5 min and resuspend the pellet in the volume of fresh medium required to yield  $2 \times 10^6$ .
4. While cells are centrifuging, prepare a 15% (v/v) solution of sterile DMSO as follows: Add the required volume of DMSO to a glass screw-capped test tube and place it in an ice bath. Allow the DMSO to solidify. Add the required volume of refrigerated filtered artificial seawater. Dissolve the DMSO by inverting the tube several times.

\*NOTE: If the DMSO solution is not prepared on ice, an exothermic reaction will occur that may precipitate certain components of the medium.

5. Mix the cell preparation and the DMSO in equal portions. Thus, the final concentration will be at least  $10^6$  cells/ml and 7.5% (v/v) DMSO. The equilibration time (the time between addition of DMSO and the start of the cooling cycle) should be no less than 15 min and no longer than 30 min.
6. Dispense in 0.5 ml aliquots into 1.0 - 2.0 ml sterile plastic screw-capped cryovials (special plastic vials for cryopreservation).
7. Place the vials in a controlled-rate freezing unit. From room temperature cool at -1°C/min to -40°C. If the freezing unit can compensate for the heat of fusion, maintain rate at -1°C/min through the heat of fusion.



Product Sheet

***Neoparamoeba*  
*pemaquidensis* (ATCC®  
30735™)**

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: *Neoparamoeba pemaquidensis* (ATCC® 30735™)

At -40°C plunge into liquid nitrogen. Alternatively, place the vials in a Nalgene 1°C freezing apparatus. Place the apparatus at -80°C for 1.5 to 2 hours and then plunge ampules into liquid nitrogen. (The cooling rate in this apparatus is approximately

-1°C/min.)

8. The frozen preparations are stored in either the vapor or liquid phase of a nitrogen freezer.

9. To establish a culture from the frozen state place an ampule in a water bath set at 35°C (2-3 min). Immerse the vial to a level just above the surface of the frozen material. Do not agitate the vial.

10. Immediately after thawing, aseptically remove the contents of the ampule and distribute to the center of a fresh plate of ATCC medium 994. Distribute the material evenly over the plate using a spread bar. Seal the plate with Parafilm, place upright in a moist-chamber, and incubate at 25°C. Trophozoites should be seen within 2-3 d.



**References**

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**

This product is intended for laboratory research purposes only. It is not intended for use in humans.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

© ATCC 2013. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [02/06]

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor