



Product Sheet

# *Synechococcus sp.* (ATCC® 27180™)

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: *Synechococcus sp.* (ATCC® 27180™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
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800.638.6597 or 703.365.2700  
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## Description

**Designation:** PCC 6717 [ATCC 29401, Y52s]

**Deposited Name:** *Synechococcus sp.*

## Propagation

### Medium

ATCC® Medium 616: Medium BG-11 for blue-green algae

### Growth Conditions

**Temperature:** 37.0°C

**Atmosphere:** Under light intensity of 2,000-3,000 lux

### Propagation Procedure

Incubate test tube cultures under above conditions upon receipt. **DO NOT STORE IN A REFRIGERATOR.** It is helpful to incubate test tubes in a slanted position to increase gas exchange in broth and to enhance exposure to light. Transfer culture to fresh media within one week of arrival, as follows:

1. Withdraw 0.6 ml from the base of a broth culture where cells are concentrated, or harvest cells from a slant culture with 0.6 ml of #616 broth.
2. Using this aliquot, inoculate one broth and one slant tube with 0.2 and 0.4 ml respectively. **Best growth is obtained when the volume of broth in the test tube is kept to 3 mls or less.**
3. Incubate tubes at 35 - 37°C under 2000-3000 LUX light.

## Notes

Good growth, indicated by increased pigmentation in the broth or on the slant, should occur after one to two weeks of incubation. Examine cells microscopically to assure that they are intact and healthy. At this time additional test tubes or flasks can be inoculated. A 5% inoculum is recommended (i.e. 5 ml of culture to 100 ml fresh medium).

**To minimize change in a culture, it is recommended that a frozen seed stock be established from early passage cells. This may be accomplished by propagating the strain under ideal conditions, utilizing recommended medium, temperature and light. Prepare a concentrated cell suspension, after good growth is achieved. If grown in broth, pellet the cells by centrifugation. Decant the supernatant and resuspend the pellet in fresh #616 broth using 1/10 or less of the original volume. For slant cultures, wash cells off the agar surface with a minimal amount of #616 broth so that a concentrated cell suspension is attained. Add 50% DMSO solution to the concentrated cell suspension so that the final concentration of DMSO in the suspension is 5%. Dispense small aliquots (0.5 to 1 ml) of the suspension into small sterile vials. Store the vials at -50°C or below.**

**When needed, remove vials from storage, thaw contents in a 37°C water bath and inoculate into recommended medium. A minimum of 0.2 ml of the thawed stock should be used to inoculate 5 ml of broth or 1 agar slant.**

## 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.

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longer valid.

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**Disclaimers**

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

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