



Product Sheet

# *Anabaena variabilis* (ATCC® 29413™)

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: *Anabaena variabilis* (ATCC® 29413™)

## Description

**Designation:** [IUC 1444; MSU A-37]

**Deposited Name:** *Anabaena variabilis* Kutzling

## Propagation

### Medium

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

### Growth Conditions

**Temperature:** 26.0°C

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

### Propagation Procedure

1. Open vial according to enclosed instructions.
2. Using a single tube of #616 broth (5 to 6 ml), withdraw approximately 0.5 to 1.0 ml with a Pasteur or 1.0 ml pipette. Rehydrate the entire pellet.
3. Aseptically transfer this aliquot back into the broth tube. Mix well.
4. Use several drops of the suspension to inoculate a second tube of broth and a #616 slant.
5. **Incubate tubes at 26°C under 2000-3000 LUX light. It is helpful to incubate test tubes in a slanted position to increase gas exchange in broth and to enhance exposure to light.**

## Notes

Good growth, indicated by increased pigmentation in the broth or on the slant, should occur after 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.

## 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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## Disclaimers

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

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**(ATCC® 29413™)**

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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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