**Lactobacillus amylovorus Nakamura 33621™**

**Description**

*Strain designation:* NRRL B-4549  
*Deposited As:* *Lactobacillus amylovorus* Nakamura  
*Type strain:* No

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**Storage Conditions**

*Product format:* Freeze-dried  
*Storage conditions:* 2°C to 8°C

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**Intended Use**

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

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**BSL 1**

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization’s policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.
ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis
For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions
Medium:
ATCC Medium 416: Lactobacilli MRS Agar/Broth
Temperature: 37°C
Atmosphere: 95% Air, 5% CO₂

Handling Procedures
1. Open vial according to enclosed instructions or visit www.atcc.org for instructions.
2. Rehydrate the entire pellet with approximately 0.5 mL of #416 broth. Aseptically transfer the entire contents to a 5-6 mL tube of #416 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary broth tube to these secondary broth tubes.
3. Use several drops of the primary broth tube to inoculate a #416 plate and/or #416 agar slant.
4. Incubate at 37°C for 24-48 hours in an atmosphere of 5% CO₂.

**Notes**
Additional information on this culture is available on the ATCC® web site at www.atcc.org.

**Material Citation**
If use of this material results in a scientific publication, please cite the material in the following manner: *Lactobacillus amylovorus* Nakamura (ATCC 33621)

**References**
References and other information relating to this material are available at www.atcc.org.

**Warranty**
The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid.
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Revision
This information on this document was last updated on 2021-05-19

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