



# ***Bacillus subtilis*** **(Ehrenberg) Cohn**

**21332™**

## **Description**

*Bacillus subtilis* subsp. *subtilis* strain IAM 1213 is a bacterial strain that produces surfactin. This strain is propagated aerobically in nutrient medium.

**Strain designation:** IAM 1213

**Deposited As:** *Bacillus subtilis* (Ehrenberg) Cohn

**Type strain:** No

**Patent depository:** This material was deposited with the ATCC Patent Depository to fulfill U.S. or international patent requirements. This material may not have been produced or characterized by ATCC. As an International Depository Authority (IDA) for patent deposits, ATCC is required to complete viability testing only at time of initial deposit of patent material. Patent deposits are made available on behalf of the Depositor when the pertinent U.S. or international patent is issued, but material may not be used to infringe the patent claims.

**Patent number:**

3,687,926

**Technical information:** ATCC Product Experience does not have technical information on patent deposits that are not produced or characterized by ATCC. Additional information can be found in the corresponding patent available from the patent holder or with the U.S. and/or international patent office.

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## **Storage Conditions**

**Product format:** Freeze-dried

**Storage conditions:** -70°C or colder

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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

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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.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Growth Conditions

**Medium:**

ATCC Medium 3: Nutrient agar or nutrient broth

**Temperature:** 30°C

**Atmosphere:** Aerobic

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**Handling Procedures**

1. Open thawed vial according to enclosed instructions or visit [www.atcc.org](http://www.atcc.org) for instructions.
  2. Aseptically transfer the entire contents to a 5-6 mL tube of #3 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary broth tube to these secondary tubes.
  3. Use several drops of the primary broth tube to inoculate a #3 plate and/or #3 agar slant.
  4. Incubate all tubes and plates at 30°C for 24 to 48 hours.
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**Notes**

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

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**Material Citation**

If use of this material results in a scientific publication, please cite the material in the following manner: *Bacillus subtilis* (Ehrenberg) Cohn (ATCC 21332)

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**References**

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

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