Product Information Sheet for NR-52257

Bacillus coagulans, Strain NRS 609

Catalog No. NR-52257
(Derived from ATCC® 7050™)

For research use only. Not for use in humans.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Bacillaceae*, *Bacillus*
Species: *Bacillus coagulans*
Strain: NRS 609
Original Source: *Bacillus coagulans (B. coagulans)*, strain NRS 609 was deposited to ATCC® in 1961 by Dr. N. R. Smith.[1,2] The strain was originally isolated by B. W. Hammer in 1915.[3]
Comments: The complete genome of *B. coagulans*, strain NRS 609 has been sequenced (GenBank: ATUM00000000).

Bacillus coagulans is a thermophilic, non-pathogenic, Gram-positive, spore-forming, facultative anaerobe. It is commonly found in soil, silage, dairy products and spoiled foods.

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Nutrient broth supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:
NR-52257 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:
Media:
Nutrient broth or Tryptic Soy broth or equivalent
Nutrient agar or Tryptic Soy agar or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Aerobic
Propagation:
1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 1 day.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Bacillus coagulans,* Strain NRS 609, NR-52257."

Biosafety Level: 1
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:
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References:
1. Smith, N. R., et al. "Aerobic Mesophilic Spore-Forming Bacteria." U. S. Dep. Agric. Misc. Publ. 559 (1946): 41.
2. Gordon, R. E. and N. R. Smith. "Aerobic Sporeforming Bacteria Capable of Growth at High Temperatures." J. Bacteriol. 58 (1949): 327-341. PubMed: 16561790.

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3. Hammer, B. W. "Bacteriological Studies on the Coagulation of Evaporated Milk." Iowa Agric. Exp. Stn. Res. Bull. 19 (1915): 119-131.
4. Skerman, V. B. D., et al. (editors) "Approved Lists of Bacterial Names." Int. J. Syst. Bacteriol. 30 (1980): 225-420.
5. Watanabe, K., et al. "Analysis of the Critical Sites for Protein Thermostabilization by Proline Substitution in Oligo-1,6-Glucosidase from *Bacillus coagulans* ATCC 7050 and the Evolutionary Consideration of Proline Residues." Appl. Environ. Microbiol. 62 (1996): 2066-2073. PubMed: 8787404.
6. Xu, D. and J. -C. Cote. "Phylogenetic Relationships between *Bacillus* species and Related Genera Inferred from Comparison of 3' End 16S rDNA and 5' End 16S-23S ITS Nucleotide Sequences." Int. J. Syst. Evol. Microbiol. 53 (2003): 695-704. PubMed: 12807189.

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