



Borrelia burgdorferi Johnson et al. emend. Baranton et al.

35210™

Description

Borrelia burgdorferi strain B31 is a whole-genome sequenced type strain that was isolated from a tick (*Ixodes dammini*). This bacterial culture has applications in infectious disease research, vector-borne disease research, and zoonotic disease research.

Strain designation: B31

Deposited As: *Borrelia burgdorferi* Johnson et al. emend. Baranton et al.

Type strain: Yes

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.

Technical information: ATCC Technical Services 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.

Storage Conditions

Product format: Frozen

Storage conditions: -80°C or colder

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.

BSL 2

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 submerged 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 submerged 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 1914: Revised BSK medium

Temperature: 37°C

Atmosphere: Microaerophilic

Handling Procedures

1. Thaw cryovial at room temperature and aseptically transfer the entire contents of the vial to a 10 mL tube of fresh #1914 broth. Mix well.
 2. Transfer one-tenth of this cell suspension to two or three additional 10 mL tubes of fresh #1914 broth.
 3. Incubate at 37°C. Microaerophilic conditions are needed to support proper growth, so the use of a CampyPak or similar microaerophilic atmosphere generator is recommended. Growth can be observed in an aerobic environment, but not as well as under microaerophilic conditions. Growth does not occur on agar.
-

Notes

Growth usually occurs after 4-5 days. Acid formation during growth will change the medium to a light or yellowish-orange color. Turbidity is not evident. Cells can be monitored under phase microscopy as long spiral rods, and their motility by the twitching movement.

Borrelia burgdorferi is a fragile, sensitive organism that must have the appropriate medium for growth. Rabbit serum is essential for the growth of this organism. Fresh medium enhances growth. Medium older than one month should not be used.

Purified genomic DNA of this strain is available as ATCC 35210D-5 and ATCC 35210DQ.

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: *Borrelia burgdorferi* Johnson et al. emend. Baranton et al. (ATCC 35210)

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. Except as expressly set forth herein, no other warranties of any kind are provided, express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, manufacture according to cGMP standards, typicality, safety, accuracy, and/or noninfringement.

Disclaimers

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. Any proposed commercial use is prohibited without a license from ATCC.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the ATCC product including without limitation taking all appropriate safety and handling precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the ATCC product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at www.atcc.org.

This material is cited in a US and/or international patent and may not be used to infringe the claims. Depending on the wishes of the Depositor, ATCC may be required to inform the Depositor of the party to which the material

was furnished.

Copyright and Trademark Information

© ATCC 2021. All rights reserved.

ATCC is a registered trademark of the American Type Culture Collection.

Revision

This information on this document was last updated on 2022-11-12

Contact Information

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Fax number: 703-365-2701

Email: tech@atcc.org or contact your local distributor
