



# *Helicobacter muridarum* Lee et al.

51212™

## Description

**Strain designation:** ST2

**Deposited As:** *Helicobacter muridarum* Lee et al.

**Type strain:** No

---

## Storage Conditions

**Product format:** Frozen

---

## 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

***Helicobacter muridarum* Lee et al.**

51212

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](http://www.atcc.org).

---

**Growth Conditions****Medium:**ATCC Medium 1856: *Helicobacter* mediumATCC Medium 1856: *Helicobacter* medium

ATCC Medium 260: Trypticase soy agar/broth with defibrinated sheep blood

**Temperature:** 37°C**Atmosphere:** Microaerophilic

---

**Handling Procedures**

1. Open vial according to enclosed instructions. Thaw and aseptically transfer the entire content of the vial to a tube of fresh #18 broth (5 to 6 ml). Mix well.
2. To obtain a biphasic culture, add 0.4 ml of the suspension to a #260 slant. Add

***Helicobacter muridarum* Lee et al.**

51212

remaining 0.1 ml of the suspension to a #260 plate and streak for isolation.

3. Incubate at 37°C under microaerophilic conditions. This organism requires additional free hydrogen for best growth. To obtain this, use an anaerobe jar WITHOUT an active catalyst and an ANAEROBIC gas generator pack, or other acceptable method, to obtain the desired gas mixture. Incubate slant with cap loose.

4. Within 3-5 days of incubation, good growth should be obtained in the broth pool at the bottom of the slant. Additional incubation may be required for colonies to appear on the plate. Further subcultures can be made using broth pool as the inoculum source. Subcultures will require only 24 to 48 hours of incubation.

---

## Notes

This is a slow growing organism that requires moist conditions for best growth. Growth at the broth/agar interface of the biphasic slant should occur within three days, but little turbidity will be seen. To observe growth, examine a wet mount of the broth under phase microscopy. Organisms are thick short, curved, Gram negative motile rods with 2 to 3 spiral turns. The presence of spheroid cells indicates that viability is being lost either due to age or too much exposure to oxygen.

Growth on agar takes longer than with the biphasic culture. Colonies are gray or clear forming a spreading film over the surface of the agar. Once good growth is present, these organisms tend to lose viability, especially if exposed to air for lengthy periods. Viability also decreases with repeated subculturing. The cells do not Gram stain well using traditional procedures. To obtain the best results, use a basic fuchsin counterstain in place of the safranin.

Once good growth is obtained, transfer or freeze the culture. Adding an equal amount of 20% sterile glycerol to pooled broth from several biphasic slants, followed by freezing in liquid nitrogen or *ultra-low temperature* freezer is recommended.

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

---

## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Helicobacter muridarum* Lee et al. (ATCC 51212)

---

## References

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

***Helicobacter muridarum* Lee et al.**

51212

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](http://www.atcc.org).

---

**Copyright and Trademark Information**

© ATCC 2023. All rights reserved.

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

---

**Revision**

***Helicobacter muridarum* Lee et al.**

51212

This information on this document was last updated on 2021-05-19

---

**Contact Information**

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

---