MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK™

Description

MicroQuant™

MicroQuant™ *Salmonella enterica* subsp. *enterica* (high CFU) is a quantitated, best-in-class control. This ISO 17034 reference material is provided as a pack containing 5 vials of cryopreserved pellets (10^7 to 10^8 CFU per vial) and 5 vials of rehydration buffer. This convenient, single-use format rehydrates immediately and is easy to use and store.

Strain designation: CDC 6516-60
Deposited As: *Salmonella typhimurium* (Loeffler) Castellani and Chalmers
Type strain: No
Serotype: I 4,5,12:i:1,2 (Determined by depositor)
Shipping information: 5 vials of cryopreserved pellets and 5 vials of rehydration buffer

Storage Conditions

Storage conditions: 2°C to 8°C

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.

MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK

Reference material produced under an ISO 17034 accredited process.

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 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.

Handling Procedures

MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK

1. Remove the desired number of cryopreserved reference culture vials (gray crimp) and rehydration buffer vials (green crimp) from 2-8°C storage and place into a biosafety cabinet. One vial of rehydration buffer should be used for each vial of reference culture.
2. Uncap each vial. Add 1.0 mL of rehydration buffer to the reference culture vial. Recap the vial and allow the pellet to dissolve for 30 seconds. IMPORTANT NOTE: If handing a fungal spore-forming high CFU (HQ) item, please refer to the instructions for use document page Fungal Spore-forming High CFU Kit.
3. Vortex on the high setting for 30 seconds to ensure the suspension is well mixed. The suspension is now useable and contains 10^7 to 10^8 CFU per 1.0 mL. The suspension can be used immediately or stored at 2-8°C for up to 8 hours. Note: Before plating, gently pipette the suspension up and down five times to ensure thorough mixing. If the suspension has been left standing for more than five minutes, or if it was stored at 2–8°C after rehydration, vortex the suspension again to ensure uniformity prior to use.
4. If this product is used in alignment with USP <51> guidelines, add 100 µL of the above prepared suspension to 900 µL of the test sample.
5. Add 9.0 mL of the USP recommended diluent (not provided) to the 1.0 mL of sample prepared in step 4. Follow the procedure detailed in USP Chapter <51> for the challenge test.

For quantitation

1. Follow steps 1-3 listed above.
2. Add 100 µL of the prepared suspension to 900 µL dilution buffer.
3. Repeat the dilution 4 times to achieve a dilution factor of 1.0 x 10^5.
4. From the final dilution, pipette 100 µL directly on to a non-selective media plate. Use a sterile plate spreader for optimal results. Note: ATCC quantitation results were obtained using 100 mm diameter Tryptic Soy Agar plates with 1.5% Tryptone, 0.5% Soytone, 0.5% Sodium Chloride, and 1.5% Agar (plates were procured from Teknova). Note: Sabouraud Dextrose Agar (SDA) may be used as well if appropriate for the organism.
5. Incubate plates in an incubator at the appropriate temperature and time. If following a specific pharmacopeial chapter, use the incubation conditions specified.
6. Following incubation, read the plate for CFU counts using a standard colony counting procedure.

MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK

Notes

For applications outside of compendial assays, please refer to the product page for ATCC 14028 for standard growth conditions.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5) (ATCC 14028-HQ-PACK)

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.

MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK

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.

Copyright and Trademark Information

© ATCC 2023. All rights reserved.

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

MicroQuant™ *Salmonella enterica* subsp. *enterica*, high CFU (Pack of 5)

14028-HQ-PACK

Revision

This information on this document was last updated on 2026-06-27

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 or contact your local distributor