Quantitative Synthetic DNA from *Plasmodium malariae*

PRA-3001SD™

Description

ATCC® Genuine Nucleics can be used for assay development, verification, validation, monitoring of day-to-day test variation and lot-to-lot performance of molecular-based assays. The quantitative format allows for the generation of a standard curve for quantitative PCR (qPCR) to determine protozoan load. Preparation includes the 18S rRNA gene, untranslated region (UTR), cyclooxygenase 1 and 3 (Cox1 & Cox3) and Cytochrome B (Cytb).

Organism: *Plasmodium malariae*

Genetic target: Preparation includes the 18S rRNA gene, untranslated region (UTR), cyclooxygenase 1 and 3 (Cox1 & Cox3), and Cytochrome B (Cytb)

Specification range: ≥ 1 x 10^5 copies/µL

Volume: 100 µL

Shipping information:

Shipped in a proprietary stabilization matrix

Storage Conditions

Product format: Frozen

Storage conditions: -20°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.

The synthetically engineered sequence of the product constitutes intellectual property belonging to ATCC. Unauthorized use, including sequencing, modification, or reverse-engineering, of the product is expressly prohibited without prior ATCC consent.

BSL 1

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.

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

1. Thaw the vial at room temperature and immediately place on ice. Avoid exposing the synthetic DNA to repeated freeze-thaw cycles as it may result in degradation of the DNA and variation in copy number.
2. Gently mix the sample to ensure an even distribution of material.
3. Briefly centrifuge the tube before opening to ensure all liquid is at the bottom.

Notes

Aliquoting is highly recommended to avoid multiple freeze-thaws, which can damage the synthetic DNA.

The following primers and probe can be used with this nucleic acid preparation Ref Rougemont M, et al. Detection of four *Plasmodium* species in blood from humans by 18S rRNA gene subunit-based and species-specific real-time PCR assays. J Clin Microbiol 42(12): 5636-5643, 2004. :
Forward primer: GTTAAGGGAGTGAAGACGATCAGA
Reverse primer: AACCCAAAGACTTTGATTTCTCATAA
Probe: ACCGTCGTAATCTTAACCATAAACTATGCCGACTAG

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Quantitative Synthetic DNA from *Plasmodium malariae* (ATCC PRA-3001SD)

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.

Copyright and Trademark Information

Revision

This information on this document was last updated on 2024-10-26

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