Quantitative Synthetic Avian Influenza Virus (H7N9) RNA

VR-3437SD™

Description

Quantitative Synthetic Avian Influenza Virus (H7N9) RNA is a synthetically derived preparation that can be used for assay development, verification, and validation as well as 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 viral load. The synthetic RNA preparation includes two constructs. Construct A includes the full genes for the HA and NP regions. Construct B includes the full genes for the NA, M1/M2, and NEP/NS1 regions. This product is based on the A/Shanghai/4664T/2013 influenza virus sequence with few modifications to accommodate manufacturing and product compatibility with H7-specific and N9-specific assays. The section of the hemagglutinin gene encoding the polybasic cleavage site in the protein has been removed.

Organism: Influenza A virus (H7N9)

Genetic target: The synthetic RNA preparation includes two constructs. Construct A includes the full genes for the HA and NP regions. Construct B includes the full genes for the NA, M1/M2, and NEP/NS1 regions.

Specification range: Construct A: ≥ 1 x 10^5 to 1 x 10^6 copies/µL

Construct B: ≥ 1 x 10^5 to 1 x 10^6 copies/µL

Volume: 100 µL

Shipping information:

Shipped in a proprietary stabilization matrix

Storage Conditions

Product format: Frozen

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Storage conditions: -70°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

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1. Thaw the vial on ice. Avoid exposing the synthetic RNA to repeated freeze-thaw cycles as it may result in degradation of the RNA 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

RNA is easily degraded. Take extra precautions against contamination by using new gloves and clean lab coats when working with RNA. Use only RNase-free lab materials when handling this product. Vortexing can damage the synthetic RNA. Gentle pipetting is highly recommended. Aliquoting is highly recommended to avoid multiple freeze-thaws, which can damage the synthetic RNA.

This construct is synthetically derived and therefore does not contain any viable material and cannot replicate.

For information regarding the in silico analysis of primer/probe matches with the product sequence, please review the technical data sheet.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Quantitative Synthetic Avian Influenza Virus (H7N9) RNA (ATCC VR-3437SD)

References

References and other information relating to this material are available at www.atcc.org.

Warranty

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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.

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