



# Quantitative Synthetic Norovirus G1 (I) RNA

VR-3234SD™

## Description

Quantitative synthetic Norovirus G1 (I) RNA 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. This preparation includes fragments from the RNA-dependent RNA polymerase and VP1 (ORF1-ORF2 junction) regions.

**Organism:** Norovirus G1 (I)

**Genetic target:** Preparation includes fragments from the RNA-dependent RNA polymerase and VP1 (ORF1-ORF2 junction) regions.

**Specification range:**  $\geq 1 \times 10^5$  to  $1 \times 10^6$  copies/ $\mu$ L

**Volume:** 100  $\mu$ L

**Shipping information:**

Shipped in a proprietary stabilization matrix

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -70°C or colder

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## 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.

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## 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.

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## 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).

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## Handling Procedures

1. Thaw the vial at room temperature and immediately place 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.
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## 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. Aliquotting is highly recommended to avoid multiple freeze-thaws, which can damage the synthetic RNA.

**Product Availability:** ATCC® VR-3234SD is an updated version of ATCC® VR-3199SD that includes quantitated genome copies/μL and has been modified to account for customer feedback regarding various assay compatibilities. ATCC® VR-3199SD will be available while supplies last.

The following primers and probe can be used with this nucleic acid preparation [Ref Vega E, et al. Novel surveillance network for norovirus gastroenteritis outbreaks, United States. Emerg. Infect. Dis. 17\(8\): 1389-1395, 2011.](#) :

Forward primer: CGYTGGATGCGITTYCATGA

Reverse primer: CTTAGACGCCATCATCATTYAC

Probe: FAM-AGATYGCGITCICCTGTCCA-BHQ

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Quantitative Synthetic Norovirus G1 (I) RNA (ATCC VR-3234SD)

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## References

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

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## 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

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## 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