Email to COVID-19 testing community announcing availability of NIST RGTM 10169 (SARS-CoV-2 Synthetic RNA Fragments)

Dear Colleagues,

We have produced a testing material consisting of two synthetic RNA fragments from the SARS-CoV-2 genome that is intended to aid in evaluation and development of new and existing RT-qPCR assays. This material can be used to calibrate RT-qPCR methods and to benchmark/compare other SARS-CoV-2 controls/materials.

We have characterized this material by size and multiple reverse transcription droplet digital PCR (RT-ddPCR) assays as well as qPCR methods. *The materials are not intended to be subjected to extraction processes.*

This Research Grade Testing Material (RGTM 10169) is not a NIST SRM (i.e. not SI traceable). However, it is well-characterized, homogeneous and undergoing continual stability testing.

Please visit https://www.nist.gov/programs-projects/sars-cov-2-research-grade-test-material to learn more, including how to order.

This page is not live at time of application. A screenshot is below.

Best regards,
Peter Vallone
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PROJECTS/PROGRAMS

SARS-CoV-2 Research Grade Test Material

DESCRIPTION

A new material from NIST can aid in the evaluation and development of RT-qPCR assays for SARS-CoV-2. We are offering a unit, free of charge, for evaluation in exchange for your feedback, which will help us improve and further develop the material.

Credit: Adobe Stock

The National Institute of Standards and Technology is supporting the nation's response to the COVID-19 pandemic with measurements, standards, data, and data science. We quickly pivoted the NIST measurement infrastructure that has long supported biotechnology and biopharmaceutical manufacturing to address critical issues in the diagnosis of and development of treatments for SARS-CoV-2.

NIST rapidly developed a reference material of synthetic fragments of the SARS-CoV-2 virus RNA, which is the target of molecular diagnostic tests. These fragments can be used to assess test equipment and perform quality checks of current and developing diagnostic assays. The material can be also be used to benchmark other emerging commercial SARS-CoV-2 tests for quality and accuracy.

Credit: Megan Cleveland

SARS-Cov-2 Research Grade Test Material is a reference material of synthetic fragments of the SARS-CoV-2 virus RNA, which is the target of diagnostic tests for COVID-19.

The SARS-CoV-2 Research Grade Testing Material (RGTM 10169) differs from a NIST SRM in that it is not as highly characterized or SI traceable, but is homogeneous and undergoing continual stability testing.

This material is intended to aid in evaluation of existing RT-qPCR assays and the development of new RT-qPCR assays, to be used as a calibrant in qPCR (dilutions), and to benchmark/compare other SARS-CoV-2 controls/materials. We've characterized this material by size and multiple reverse transcription droplet digital PCR (RT-ddPCR) assays as well as qPCR methods.

The materials are not intended to be subjected to extraction processes.

The material consists of two synthetic RNA fragments from the SARS-CoV-2 genome in a background of 5 ng/µL human Jurkat RNA (stored at -80°C, BSL-1).

Fragment 1 – regions, assays, conc.

Fragment 2 – regions, assays, conc.

TO RECEIVE RGTM 10169

If you would like a free unit of RGTM 10169, please contact us and provide the following information:

- Company/Institute/Lab/University Name:
- Contact Name:
- Contact Email:
- Contact Phone number:
- Contact Shipping address
  - Please use a specific address so that the shipment is directed to the contact.
  - We cannot ship to a P.O. Box
- Any special shipping requests

We will ship a unit to you along with a guidance sheet containing information about the material.

TO PROVIDE FEEDBACK

Your feedback regarding use of this material will help us further test, develop, and improve the materials for future development.

Example of feedback that we will request:

- How was the material used in your laboratory?
- What improvements would you suggest?
- What assays did you test/develop with the material?
  - Provide assay/platform information
  - Cq value
- How does the material compare to other SARS-CoV-2 controls/standards that you have used?
- If you quantified our material in your lab, provide an estimate of concentration:
- Feedback on stability:
- Feedback on provided volume:
- Feedback on provided concentration:
- Feedback on the material had an impact on your work:

Thank you in advance for your participation in the development of this new material from NIST.

Bioscience and Reference materials

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PROJECT STATUS

Ongoing

FUNDING

The Coronavirus Aid, Relief, and Economic Security (CARES) Act

OTHER PROJECTS

NIST and COVID-19