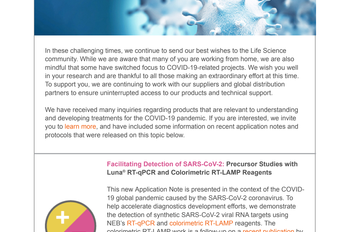


In these challenging times, we continue to send our best wishes to the Life Science community. While we are aware that many of you are working from home, we are also mindful that some have switched focus to COVID-19-related projects. We wish you well in your research and are thankful to all those making an extraordinary effort at this time. To support you, we are continuing to work with our suppliers and global distribution partners to ensure uninterrupted access to our products and technical support.

We have received many inquiries regarding products that are relevant to understanding and developing treatments for the COVID-19 pandemic. If you are interested, we invite you to learn more, and have included some information on recent application notes and protocols that were released on this topic below.

Facilitating Detection of SARS-CoV-2: Precursor Studies with Luna® RT-qPCR and Colorimetric RT-LAMP Reagents

This new Application Note is presented in the context of the COVID-19 global pandemic caused by the SARS-CoV-2 coronavirus. To help accelerate diagnostics development efforts, we demonstrate the detection of synthetic SARS-CoV-2 viral RNA targets using NEB's RT-qPCR and colorimetric RT-LAMP reagents. The colorimetric RT-LAMP work is a follow-up on a recent publication by researchers at NEB, in collaboration with researchers at the Wuhan Institute of Virology in China, demonstrating the potential of colorimetric RT-LAMP detection of SARS-CoV-2 viral RNA purified from patient samples.

Read More

Are you doing Nanopore Sequencing?

NEB offers multiple products, including NEBNext® sample prep modules, that are being recommended in a number of third party COVID-19 sequencing protocols. These protocols include "PCR tiling of COVID-19 virus" in Oxford Nanopore Technologies' Nanopore Community, and the ARTIC protocol.

Learn More

New Protocol for Monarch® RNA Purification: RNA Purification from Buccal Swabs, Nasopharyngeal Samples (swab or aspirate) and Saliva using the Monarch Total RNA Miniprep Kit

This protocol for the Monarch Total RNA Miniprep Kit has been validated with buccal swabs and saliva samples. We have also confirmed the compatibility of this workflow with viral transport medium using reference samples that do not require cell and/or viral envelope lysis. Try a sample to see how it works in your hands.

View Protocol

High-throughput qPCR and RT-qPCR Workflows: Enabled by Beckman Coulter Echo Acoustic Liquid Handling and NEB Luna Reagents

Luna qPCR reagents are a great choice for automated high-throughput qPCR and RT-qPCR applications. Highlights from this new Application Note include:

- Luna qPCR and One-Step RT-qPCR are fully compatible with Echo-mediated acoustic liquid handling
- Linear, accurate quantitation, sensitive detection, exceptional reproducibility, and robust room temperature stability during automated workflows
- Echo-mediated reaction setup enables fast, accurate, high-throughput assembly of qPCR experiments
- An adapted Luna Cell Ready protocol allows direct lysis of cells in Echo-qualified cell culture source plates for automated, high-throughput workflow

Read Application Note

nebTV webinar series

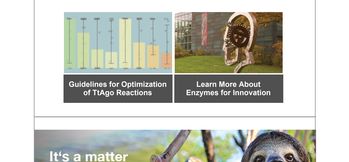
As a result of the COVID-19 crisis, work schedules have been disrupted, and we know that many of you are working from home. If that is the case, it might be a good time to catch up on the NEB TV webinar series. Hear from NEB scientists as they discuss of a wide range of molecular biology topics and techniques, as well as the latest cloning and DNA assembly, PCR and qPCR, sample preparation for next generation sequencing, and much more.

Just in case you missed it, here are some webinars that might interest you:

Achieve Faster and Better RT-qPCR Results Using a Novel Thermostable Reverse Transcriptase – Learn how you can solve some common challenges in your RT-qPCR workflow utilizing a novel, thermostable reverse transcriptase.

Ask the Experts: Everything you need to know about cloning — Whether you are new to cloning or a seasoned expert, this is the webinar for you – NEB resident cloning experts answer questions submitted by our customers.

Gene Editing 101 : A practical guide to genome editing – This overview covers topics such as increasing editing efficiency, sgRNA synthesis and methods for assessing genome editing efficiency.



NEBNext Update

Less than one year ago, New England Biolabs® introduced NEBNext® Enzymatic Methyl-seq (EM-seq™), making an indelible mark on epigenetics research. Single-base resolution methylome analysis can now be achieved without damaging sodium bisulfite treatment prior to sequencing, and the more-intact DNA resulting from enzymatic EM-seq conversion means more sensitive detection with fewer reads.

Research, both at NEB® and from our EM-seq adopters, continues to demonstrate how EM-seq is pushing the limits of what's possible when methylome analysis has a gentler side. Learn more in the following posters, publications and videos:

EM-seq enables accurate and robust methylation selection of cell-free DNA and FFPE DNA sample types

EM-seq: Detection of DNA methylation at single base resolution from picograms of DNA

Non-destructive enzymatic deamination enables single-molecule long read sequencing for the determination of 5-methylcytosine and 5-hydroxymethylcytosine at single-base resolution

Sequence and annotation of 42 *Cannabis* genomes reveals extensive copy number variation in cannabinoid synthesis and pathogen resistance genes

Watch our NEB TV episode where we discuss the challenges associated with current methods available for methylome analysis, and introduce NEBNext EM-seq as an alternative to bisulfite sequencing that addresses these challenges.

Product Information | **Download Technical Note for Performance Data**

When you're ready to test EM-seq in your own lab, request a sample.

New product:

Tth Argonaute (TtAgo)

Thermus thermophilus argonaute (TtAgo) is a programmable DNA endonuclease that uses a ssDNA guide to target a specific substrate sequence. TtAgo introduces one break in the phosphodiester backbone of the complementary sequence.

TtAgo is the first commercially-available prokaryotic argonaute from NEB, and is an Enzyme for Innovation.

Product Details

Introduction to Prokaryotic Argonautes

Guidelines for Optimization of TtAgo Reactions

Learn More About Enzymes for Innovation

It's a matter of expression

Learn more about NEB's history in protein expression and purification

NEB has been involved in expressing and purifying proteins since the dawn of the recombinant DNA era in the 1970s – whether it be for our own research interests for our manufacturing processes. In 1978, NEB began screening microorganisms for restriction enzymes. Our scientists remember the challenges involved in purifying limited amounts of restriction enzymes and other proteins from these native organisms isolated from the environment. The efforts of NEB scientists to clone, overexpress and purify restriction enzymes from recombinant systems greatly advanced the field of molecular biology. Many of the original methods used by NEB scientists have endured and have been applied by countless scientists to study the structure and function of individual proteins. Find out how we are striving to develop faster, simplified methods for recombinant protein expression and purification which rely on engineered protein expression hosts or optimized cell-free systems.

Download Feature Article (NEB Expressions Magazine) | **Listen to Podcast**

Kvalitex Kft., 1138 Budapest, Pannónia u. 11., Tel.: (+36) 1 340 4760, E-mail: info@kvalitex.hu, Web: www.kvalitex.hu