



Happy New Year!

Happy New Year from all of us here at New England Biolabs.

As the festive period is just over, we are confidentially embarking with you on a new endeavor, which is the new year 2021! May this new scientific year not only bring us all the eagerly awaited vaccines, but also bring you fresh ideas and motivation for your research that spurs your ongoing professional career.

We are honored to be able to support your research and are looking forward to serving you again.

Thank you for your business, stay curious, and – most importantly – stay healthy!

Yours faithfully,
NEB Team



webinar series



As the new year's just begun, we thought it might be a good time to catch up on the [NEB TV webinar series](#).

Hear more from NEB scientists as they discuss of a wide range of molecular biology topics and techniques, such as the ongoing need for improved high molecular weight (HMW) DNA extraction methods, NEB's products that support COVID-19 diagnostic efforts, advances in sample preparation for next generation sequencing, and much more.

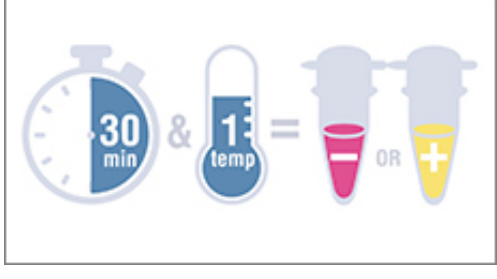
Just in case you missed them, here are our top 5 webinars of 2020:



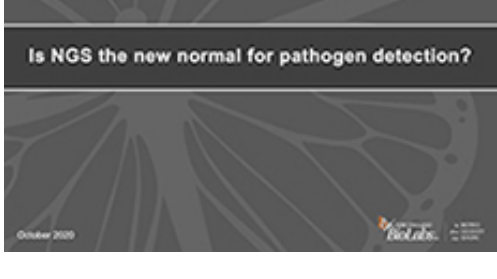
The mechanism and applications of the template switching activity of reverse transcriptases – Find out how single-cell RNA-Seq (scRNA-Seq) has transformed our understanding of biology, providing insight into cellular diversity, developmental processes and disease pathogenesis.



Proteins made easy: cell free protein synthesis – Learn about the advantages of cell-free protein synthesis over traditional cellular expression methods, and find out more about NEB products available.



RT-qPCR and Colorimetric LAMP approaches to SARS-CoV-2 viral detection – In this webinar, we will provide an overview of NEB's products for DNA amplification, and discuss how they can be used to support COVID-19 diagnostic efforts.



Is NGS the new normal for pathogen detection? – Learn more about the unique perspectives across academia and industry on the use of NGS technologies to address SARS-CoV-2 pathogen detection.



Fast and efficient extraction of high molecular weight DNA – overcoming a bottleneck for long read technologies – Hear about NEB's novel approach to HMW DNA extraction, which utilizes a simple workflow to quickly purify high quality HMW DNA from cells, blood, tissue and bacteria. Purified DNA is ready for use in downstream applications including long-read sequencing.



Selecting the right NGS sample indexing strategy for your experimental goals

Selecting the right NGS samples indexing strategy can help you take your sequencing to the next level. Recent advances in library prep workflows leverages the multiplexing oligo to enable new heights of sequencing accuracy.

With Unique Dual Indices (UDI), it's possible to address the challenge of index hopping, which is a misassignment of ~5% of reads caused by the spatial dynamics of patterning flow cells. NEBNext® offers four sets of UDI primer pairs (NEB #E6440, #E6442, #E6444, #E6446) for use in tandem with a truncated adaptor.

For even greater sequencing accuracy, adding a Unique Molecular Identifier (UMI) sequence to a UDI index adaptor enables the identification and removal of duplicate reads, PCR errors, and single nucleotide variants. For maximal convenience, the UDI in this adaptor also enables a PCR-free DNA sequencing workflow, saving time and minimizing PCR bias. NEBNext offers this Adaptor for both DNA (NEB #E7395) and RNA (NEB #E7416) workflows.

Start strategizing now with the [NEBNext Multiplex Oligos Selection Chart](#), and get the most out of your NGS.



NEBNext Multiplex Oligos Selection Chart

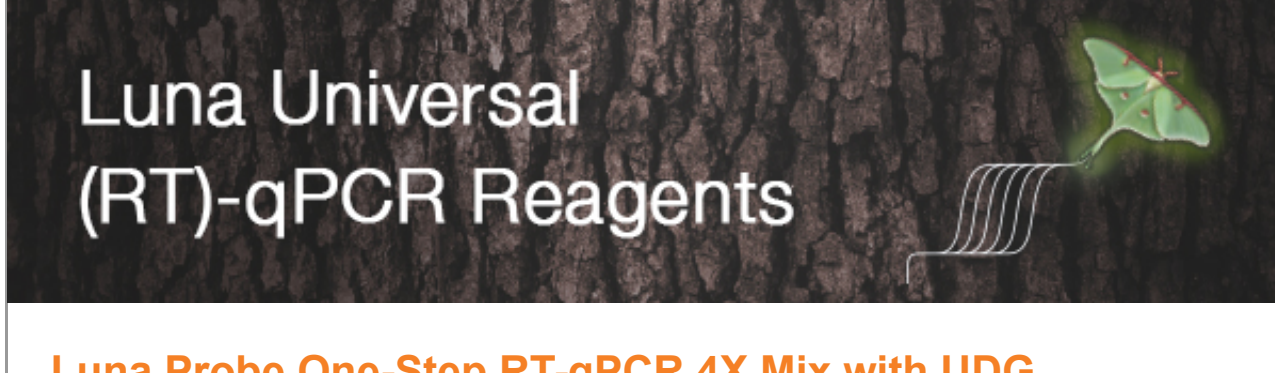
Love long reads? Our new Monarch HMW DNA Extraction Kits do too!

Long read sequencing platforms (e.g., Oxford Nanopore Technologies®) are steadily improving their accuracy and flexibility, but there's no getting around the need for high quality, intact high molecular weight (HMW) DNA. The new Monarch® HMW DNA Extraction Kits can isolate hundreds of kilobases, and even megabases of DNA with a quick and tunable workflow. Optimized for cells and blood (NEB #T3050) or tissue and bacteria (NEB #T3060), this novel workflow outperforms other options.



Visualize how HMW DNA is extracted from cells and blood with the Monarch HMW DNA Extraction Kit for Cells & Blood [in this video](#).

Learn More About Monarch HMW



Luna Probe One-Step RT-qPCR 4X Mix with UDG

The new *Luna Probe One-Step RT-qPCR 4X Mix with UDG* enables sensitive detection of target RNA sequences, with robust performance in multiplex applications of up to 5 targets.

- Simplify your reaction setup with a single-tube master mix format
- Increase sensitivity of your RT-qPCR, as 4X concentration allows for more sample input
- Maximize your throughput by multiplexing up to 5 targets
- Luna WarmStart RT paired with Hot Start Taq increases reaction specificity and robustness, enabling room temperature setup
- Reduce risk of carryover contamination, with UDG and dUTP included in the
- Eliminate pipetting errors with non-interfering, visible blue tracking dye

	Luna® Universal Probe One-Step RT-qPCR Kit (NEB #E3006)	Luna Probe RT-qPCR 4X Mix with UDG (NEB #M3019)
20X RT Enzyme Mix	2X Reaction Mix	4X Master Mix
Number of tubes	2	1
Concentration (sample-limiting)	2X	4X
dUTP included	✓	✓
UDG included	✗	✓
Universal ROX included	✓	✓

Learn more!