

JUNK or GOLD?

Unlock the Myths of Non-Coding RNAs

In the recent years, the discovery of non-coding RNA (ncRNA) regulatory activities has unleashed alluring opportunities of finding new disease regulators, biomarkers and therapeutic targets. Did you know that Arraystar offers dedicated solutions for ncRNAs, including lncRNAs, circular RNAs, tRNAs, tRFs and more?

LncRNA Microarrays

2019 New Releases: Human V5.0, Mouse V4.0, Rat V3.0

Circular RNA Microarrays

The only practical choice to profile circular RNAs accurately

Epitranscriptomic Microarrays

Quantify the percentage of modifications for mRNAs, lncRNAs and CircRNAs

nrStar™ ncRNA PCR Arrays

For lncRNAs, microRNAs, tRNAs, tRFs, and snoRNAs

We Help You

from Sample
to Data,
featuring annotations and
analyses specialized for
ncRNA biology.



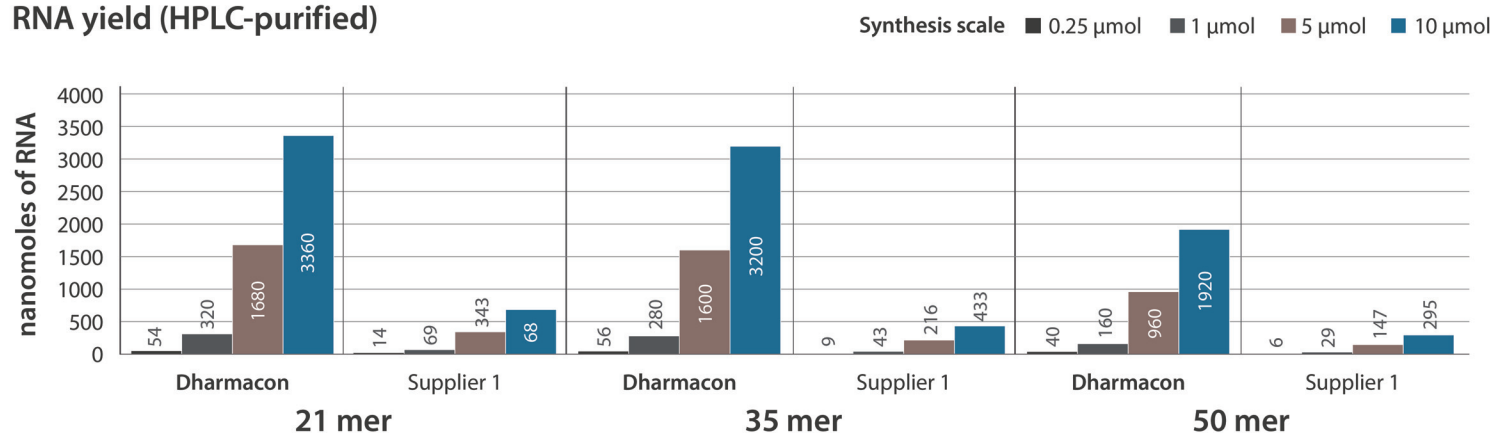
Start Your Non-coding RNA Adventure Now!
www.arraystar.com

Meet your custom RNA requirements with our nearly limitless synthetic options.

If your NMR, crystallography, or RNA binding study requires a non-standard chemical modification or a commercially unavailable modified nucleobase, we can help. For more than 20 years our chemists have utilized Dharmacon™ proprietary 2' ACE chemistry to synthesize RNA with superior yield and quality giving you the flexibility you need.

Better RNA yields give you more for your money.

RNA yield (HPLC-purified)



The yield for RNA oligos of three different lengths was compared for all available synthesis scales between Dharmacon and a competitor.

AACR American Association
for Cancer Research

ANNUAL MEETING

2020 • SAN DIEGO

APRIL 24-29

TURNING SCIENCE INTO LIFESAVING CARE

Join us in San Diego for the latest innovative and inspiring cancer research from around the world...the AACR ANNUAL MEETING 2020!

REGISTER TODAY!

Become a Member!

Join the AACR and receive a discount on registration.



Continuing Medical Education Activity -
AMA PRA Category 1 Credits™ available

The AACR Annual Meeting highlights the work of the greatest minds in cancer science and medicine from institutions all over the world. This meeting presents the many scientific discoveries across the breadth of cancer research—from prevention, early detection, and interception; to cancer biology, translational, and clinical studies; to survivorship, population science, and advocacy. This year's program, with the theme of "Turning Science into Lifesaving Care," will be a comprehensive, cutting-edge scientific event that you will not want to miss!

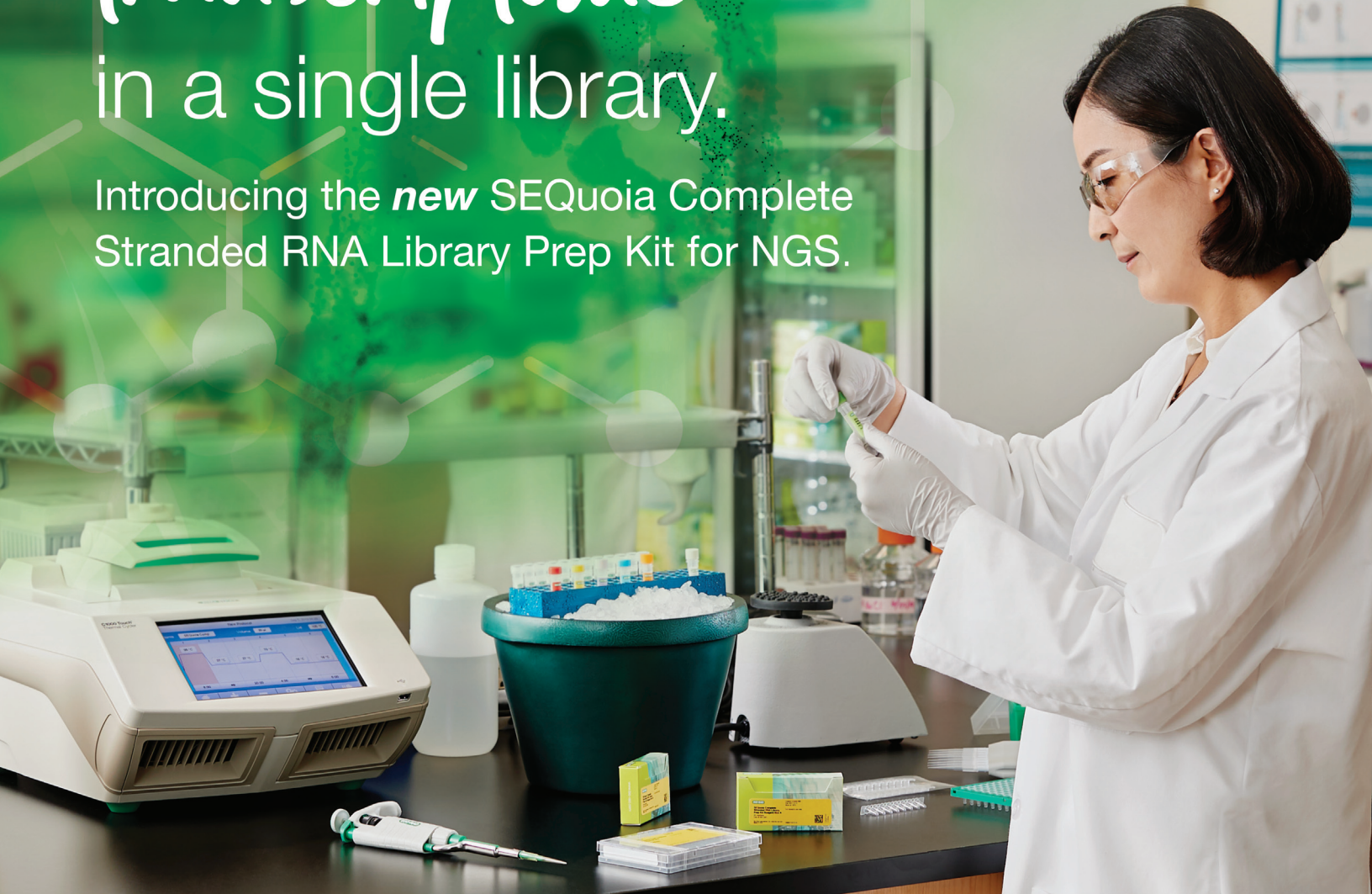
We look forward to seeing you!

AACR.ORG • [#AACR20](https://twitter.com/AACR20)



Capture the entire transcriptome— in a single library.

Introducing the *new* SEQuoia Complete Stranded RNA Library Prep Kit for NGS.



It's new. It's different. And it's only from Bio-Rad.

The SEQuoia Complete Stranded RNA Library Prep kit gives you a truly holistic view of the transcriptome, capturing all types of RNAs (long, short, and everything in between) from all types of samples in less than 4 hours. With unparalleled uniformity of coverage, strandedness, and efficiency, what you will discover will definitely surprise you.

Are you ready for a new approach to transcriptomics?
Get the details at [bio-rad.com/SEQuoiaCompleteRNA](https://www.bio-rad.com/SEQuoiaCompleteRNA)

#ScienceForward

BIO-RAD

A REVOLUTION

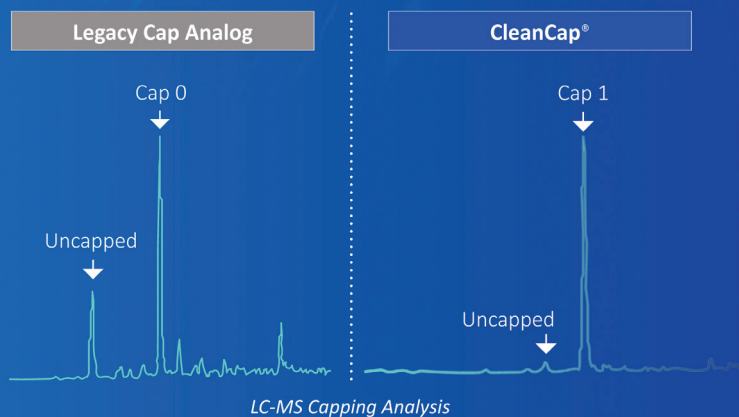
in Co-Transcriptional mRNA Capping

CleanCap® demonstrates superior performance versus legacy co-transcriptional capping methods

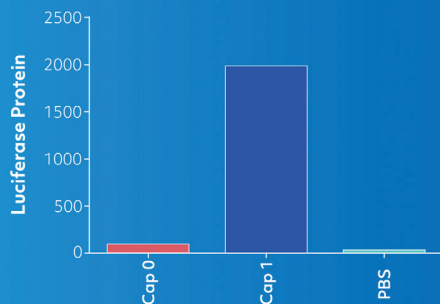
| | Legacy Cap Analogs | CleanCap® |
|--------------------------------|--------------------|--------------------------|
| Natural Cap | No ⊖ | Yes ⊕ |
| Immunogenic | Yes ⊖ | Reduced Immunogenicity ⊕ |
| Capping Efficiency | ~70% ⊖ | ~95% ⊕ |
| Yield/mL Transcription | 1.5 mg/mL ⊖ | 4 mg/mL ⊕ |
| Cost | 3 X ⊖ | 1 X ⊕ |
| Available Therapeutic Licenses | No ⊖ | Yes ⊕ |



Successful development of mRNA therapeutics relies on reproducible, high-efficiency production of capped mRNA. CleanCap® uses a new co-transcriptional chemical process for the highest level of mRNA capping:



CleanCap® gives superior activity *in vivo* by mimicking a natural cap



Luciferase mRNA was formulated with Lunar Lipids and injected by tail vein into mice. At 6 hours, luciferase was measured by western blot in mouse liver. Data courtesy of Arcturus Therapeutics.

CleanCap® results in a natural Cap 1 structure that does not stimulate the innate immune system of the host, resulting in unparalleled efficiency *in vivo*. Legacy co-transcriptional capping methods yield a Cap 0, an immunogenic cap structure that is poorly expressed *in vivo*. The results speak for themselves: **CleanCap®, the next generation of cap analogs, provide the most active and least toxic mRNA for your *in vivo* applications.**

Be part of the revolution.

For more information visit: trilinkbiotech.com/cleancap