

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

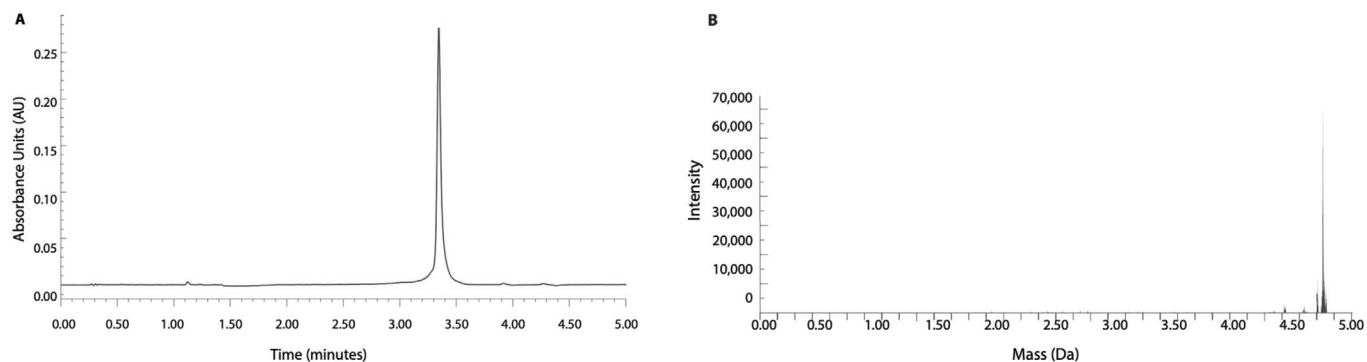
Get to the answer faster with custom oligos by DharmaconTM

Trusted suppliers of long and modified RNA
for over 20 years

Flexible design | Rapid turnaround | High yield | Trusted service

Horizon's custom RNA synthesis service offers the flexibility to design long oligos with chemical modifications added at any open position. Our patented ACE-2' chemistry produces higher yields in less time than any other oligo supplier.

Quality analysis of a custom synthesized 105 nucleotide RNA oligo



(A) UPLC analysis showing >90% pure full-length material. (B) Mass spec analysis illustrating the correct mass.

Contact us to discuss your project.
technical@horizondiscovery.com



RNA Sequencing Services from Zymo Research

Compatible with Any Organism



Transcriptomic Analysis

Applications include but not limited to transcript quantification, differential gene expression and function analysis.

		Number of Genes Detected*
Crops	Common Wheat	48000
	Corn	17200
	Common Grape Vine	14700
Livestock	Cattle	18000
	Red Junglefowl	20500
Vertebrates	Human	17100
	Mouse	14000
	Rat	14200
Microorganisms	<i>Candida albicans</i>	5700
	<i>Escherichia coli</i>	3400

*Number of gene with FPKM \geq 1

Services include everything from RNA extraction all the way to data analysis!



DNA Methylation Analysis



Epigenetic Aging Clock



ChIP-Seq



Microbiomic Analysis

Learn more and inquire about additional services at
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Take CRISPR Beyond the Bench

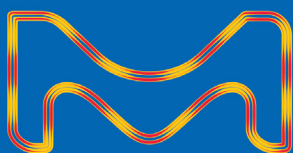
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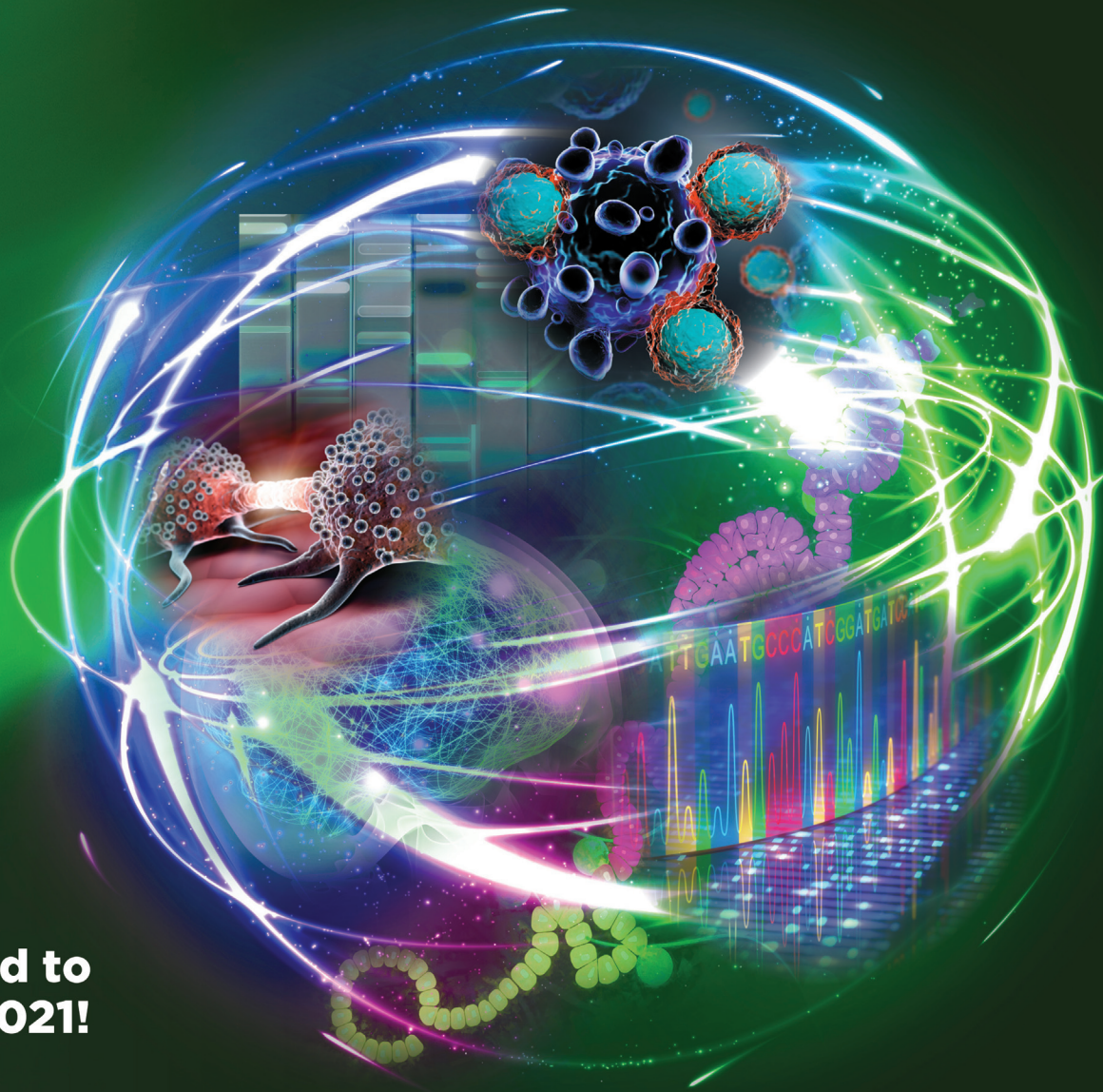
AACR

American Association
for Cancer Research®

ANNUAL MEETING

2021

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Submit your scientific findings to the world's most comprehensive annual meeting dedicated to the research, prevention, detection, and treatment of cancer.

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INFORMATION AND TO SUBMIT AN ABSTRACT!**

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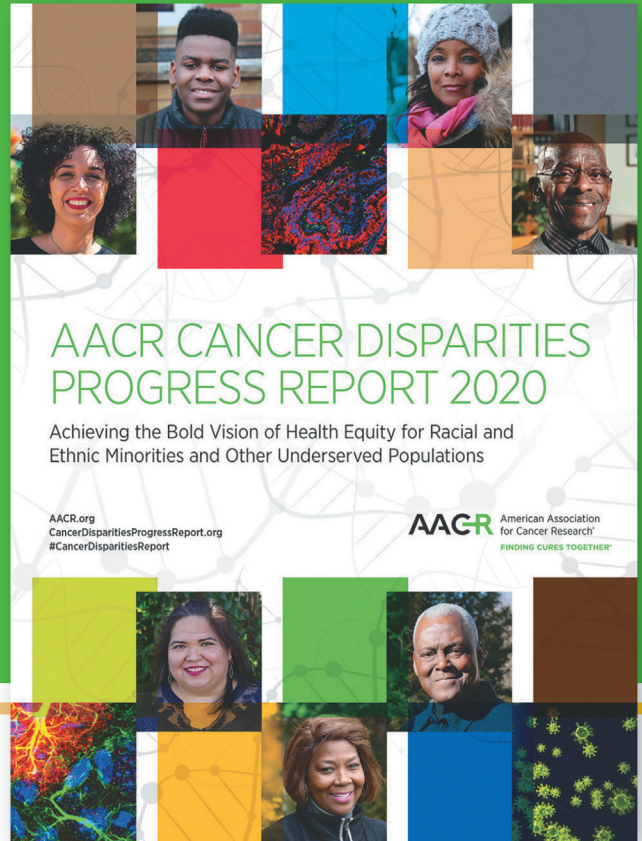


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**CLINICAL
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AACR CANCER DISPARITIES PROGRESS REPORT 2020

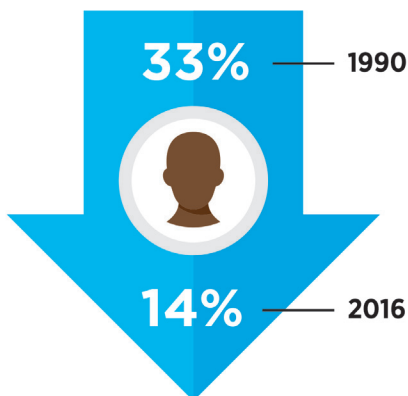
Achieving the Bold Vision of Health Equity for Racial and Ethnic Minorities and Other Underserved Populations



The American Association for Cancer Research is proud to announce the release of the inaugural *AACR Cancer Disparities Progress Report 2020*.

This report highlights the current disparities in the burden of cancer within the United States and the research that aims to mitigate these challenges. Some of the recent advances you will learn about include:

Decline in Disparity for Overall Cancer Death Rate between African Americans and Whites



The National Cancer Institute recently revised its eligibility criteria for cancer clinical trials to expand access for previously excluded patients.

Get your FREE copy of the full report by visiting

[CancerDisparitiesProgressReport.org](https://www.aacr.org/cancer-disparities-progress-report-2020)



so that you can learn about the many ways in which research is transforming lives.

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.

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A REVOLUTION

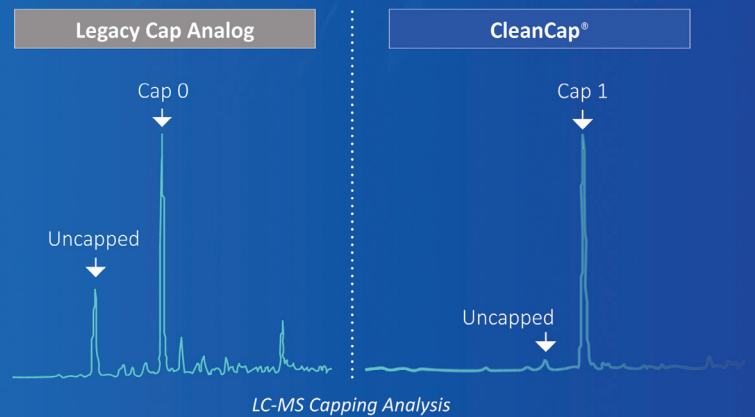
in Co-Transcriptional mRNA Capping

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

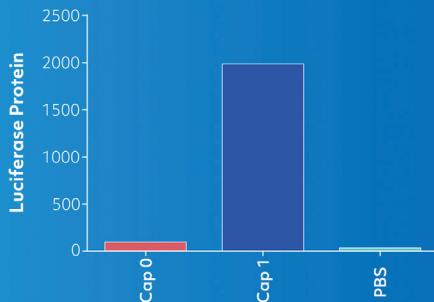
	Legacy Cap Analogs	CleanCap®
Natural Cap	No ⊖	Yes ⊕
Immunogenic	Yes ⊖	Reduced Immunogenicity ⊕
Capping Efficiency	~70% ⊖	~95% ⊕
Yield/mL Transcription	1.5 mg/mL ⊖	4 mg/mL ⊕
Cost	3 X ⊖	1 X ⊕
Available Therapeutic Licenses	No ⊖	Yes ⊕



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