

Doing science
doesn't
have to be
wasteful.

TipOne®

From our eco-friendly product design to our innovative manufacturing practices, we're committed to reducing our environmental impact. As your partners in how you do your work, together we can drive sustainability.

TipOne pipette tips are at the forefront of our sustainability efforts:

- TipOne cassettes and racks* are now made with partially recycled materials
- Their innovative refill design for standard and filter tips saves money, counter space, and packaging plastic
- Production facility is powered by 100% wind energy
- Tips are ACT® Label certified
- Racks, cassettes, and wafers are recyclable

By seamlessly integrating these eco-friendly features, we continue to develop a greener product without compromising the exceptional quality of our 100% virgin polypropylene pipette tips.



To discover more about TipOne and our sustainability efforts, visit usascientific.com/TipOne-impact

*Racks coming soon!



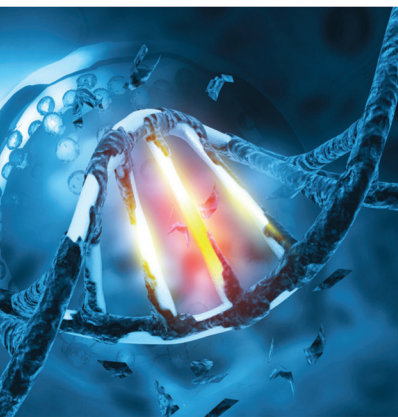
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AACR American Association
for Cancer Research®

2023-2024 SCIENTIFIC CONFERENCES

Presenting the most significant research on cancer etiology, prevention, diagnosis, and treatment



Cancer Research: Translating Cancer Evolution and Data Science: The Next Frontier

December 3-6, 2023 | Boston, MA

Conference Cochairs: Anna D. Barker, Franziska Michor, and Jeffrey P. Townsend

San Antonio Breast Cancer Symposium December 5-9, 2023 | San Antonio, TX

Codirectors: Carlos L. Arteaga and Virginia G. Kaklamani

DNA Damage Repair: From Basic Science to Future Clinical Application January 9-11, 2024 | Washington, DC

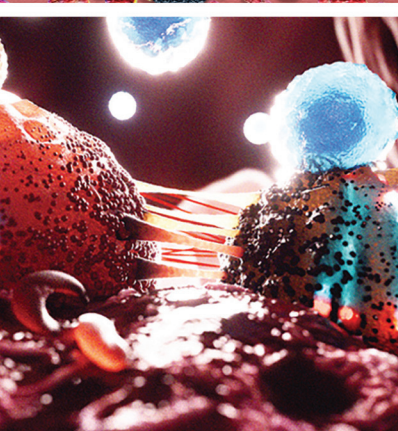
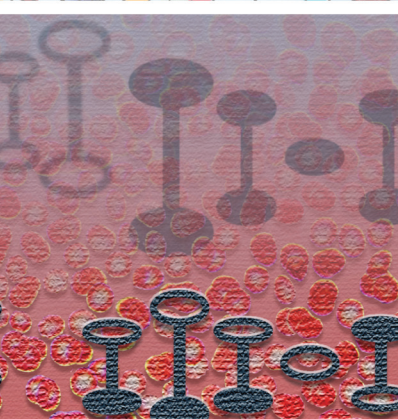
Conference Cochairs: Robert G. Bristow, David K. Cortez, Susan P. Lees-Miller, and Simon N. Powell

EACR-AACR Basic and Translational Research Conference: How to Bring Basic Science Discoveries to the Clinic February 27-29, 2024 | Dublin, Ireland

Committee Cochairs: Rene Bernards, Christine M. Lovely, and Tracy Robson

Blood Cancer Discovery Symposium March 4-6, 2024 | Boston, MA

Symposium Co-chairs: Kenneth C. Anderson, and Riccardo Dalla-Favera



April 5-10, 2024 | San Diego, CA

Early Registration Deadline: December 15, 2023

**Late Breaking Abstract Submission Opens:
December 18, 2023**

Program Committee Chairs: Keith T. Flaherty and Christina Curtis

Bladder Cancer: Transforming the Field May 17-20, 2024 | Charlotte, NC

Conference Cochairs: Lars Dyrskøjt Andersen, Donna E. Hansel, Dan Theodorescu, and Tahlita C. M. Zuiverloon

Pediatric Cancer September 5-8, 2024 | Toronto, ON, Canada

Conference Cochairs: Alejandro Gutierrez, Cynthia E. Hawkins, Andrea A. Hayes, and Gilles Vassal

Pancreatic Cancer September 15-18, 2024 | Boston, MA

Conference Cochairs: Peter J. Allen, Stephanie K. Dougan, Michael A. (Tony) Hollingsworth, and Alec C. Kimmelman

Tumor Immunology and Immunotherapy in association with the Cancer Immunology (CIMM) Working Group

October 18-21, 2024 | Boston, MA

Conference Cochairs: Yvonne Y. Chen, Sergio Quezada, Robert D. Schreiber, and Fernando Vidal-Vanaclocha

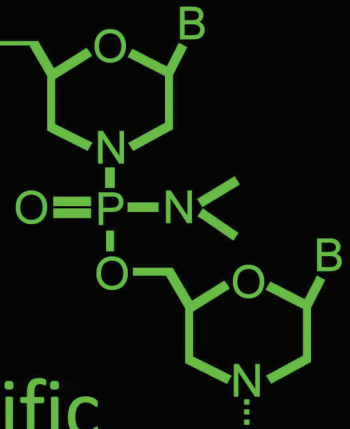
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Halt the initiation complex.

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Mask a poly-A tail signal.

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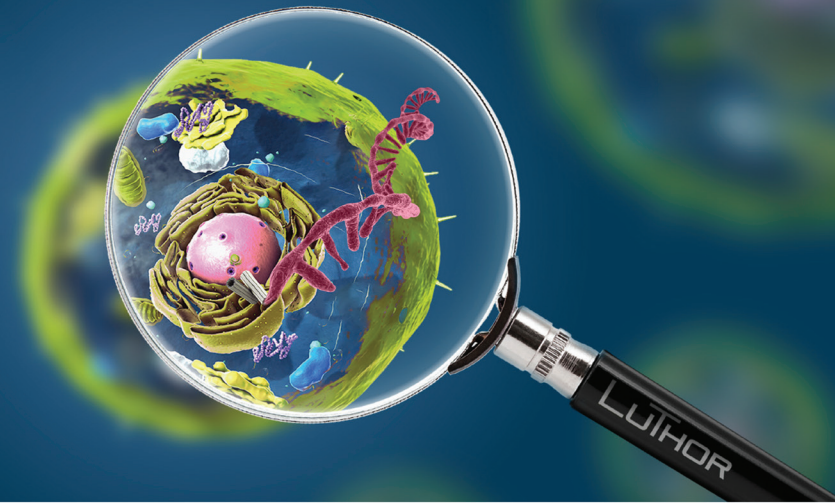
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Take a look at the whole picture with LUTHOR High-Definition scRNA-Seq kits



LUTHOR: your gateway to High-Definition Single-Cell RNA sequencing

When you need to handle subnanogram RNA amounts, you can count on LUTHOR to help! Ideally designed for samples ranging from 100 cells down to a single cell, from 1 ng down to 10 pg total RNA - and even lower - the THOR *in vitro* transcription step will open up new possibilities and allow you to see many more genes and to determine their expression levels. LUTHOR HD focuses on 3' ends of each gene, hence simplifying the data analysis to the sequences that matter for gene identification and gene count.

Library preparation starts with generation of a double-stranded template for T7-promoted *in vitro* transcription, at the gene 3' end (Fig. 1). Amplified RNA is then prepared by random-primed reverse transcription and subsequent library amplification (not shown).

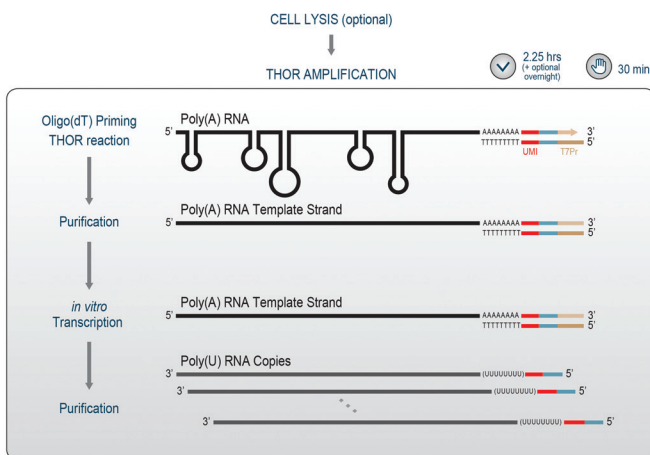


Figure 1 | THOR (T7 High-resolution Original RNA amplification) reaction diagram. Red line: UMI; blue line: Illumina adapter; light brown line: T7 promoter.

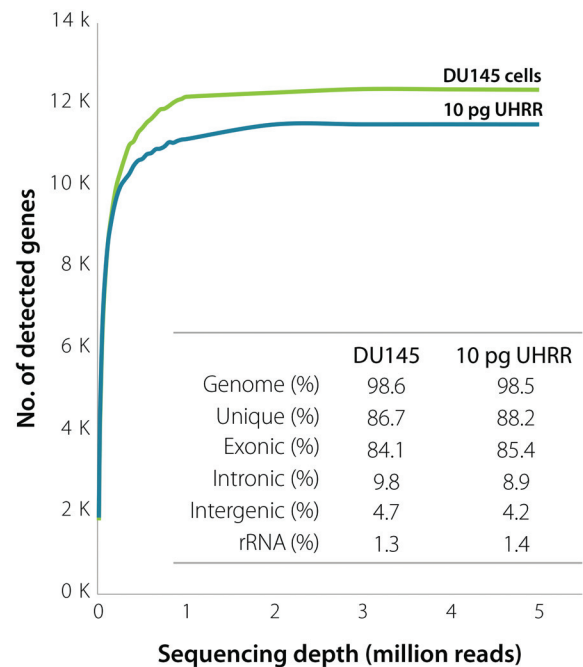


Figure 2 | Sensitivity of LUTHOR. Scatter plots of the average number of genes detected per DU145 human cell (contains 18.3 ± 1.5 pg of total RNA) and 10 pg Universal Human Reference RNA (UHRR) inferred across four replicates at stepwise-reduced read fractions (CPM > 1). Table shows sequencing alignment metrics across four DU145 cells and 10 pg UHRR replicates at 1 million read depth.



Interested to learn more?

Check the *Nature Methods* application note!