Long story short:
Bionano reveals more.

Long- and short-read NGS data identifies smaller DNA mutations, but lacks critical information around genome structure.

Bionano genome mapping fills in what's missing from sequencing-based data providing unmatched structural variation discovery and analysis for structural variations ranging from 1,000 bp to megabase pairs in length.

99% sensitivity for large homozygous insertions and deletions*

87% sensitivity for large heterozygous insertions and deletions*

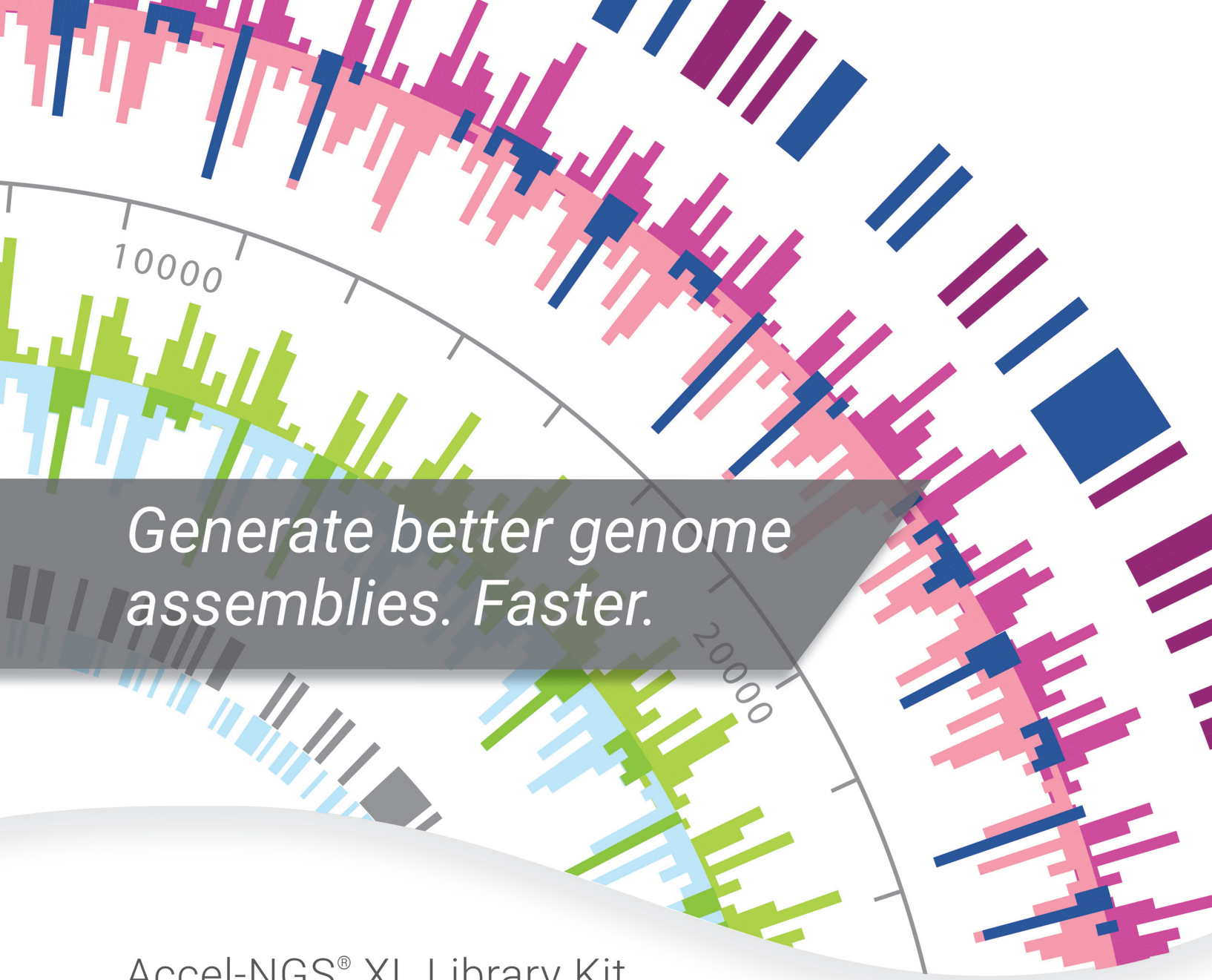
98% sensitivity for translocations*

bionano® GENOMICS

Put the power of Bionano data to work in your research.

Learn more at **bionanogenomics.com**

*Bionano Genomics. (2016). *Bionano Genomics' Next-Generation Mapping Identifies Large Structural Variants in Cancer and Genetic Disorders* [White paper]. http://bionanogenomics.com/wp-content/uploads/2017/02/Bionano_Human-Structural-Variations-White-Paper.pdf



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Revolutionize your whole genome sequencing with the longest NGS reads

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From inherited disease and cancer research to animal health studies, Ion AmpliSeq™ targeted next-generation sequencing (NGS) panels, combined with Ion Torrent™ systems, enable reliable, scalable analysis of many genes and important biomarkers, including SNPs, indels, and fusions—all with one panel, in just one NGS run.

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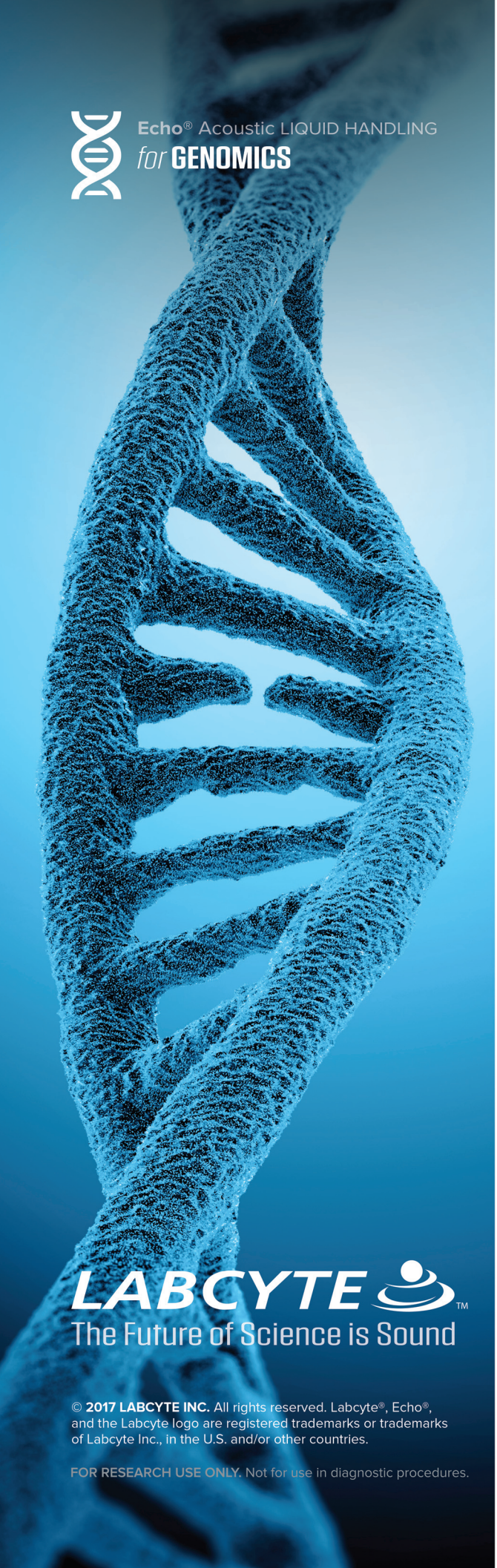

FEATURED APPLICATION NOTE

Effective Miniaturization of Illumina Nextera XT Library Prep for Multiplexed Whole Genome Sequencing and Microbiome Applications

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APPLICATION NOTE

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with high-precision acoustic liquid handling

Echo® Acoustic Liquid Handling technology is changing the traditional tip-based processes of genomic research by offering researchers the ability to miniaturize reaction volumes, resulting in significant reductions in costs related to reagents and samples. Non-contact acoustic transfers are also contamination-free and highly reproducible, and offer incomparable speed, precision and accuracy. Furthermore, the ability to transfer from any well to any well allows researchers to test a wide range of conditions repeatedly from a single source plate for assay optimization.

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- **Transfer 25 nL volume increments without compromise to coverage and data**
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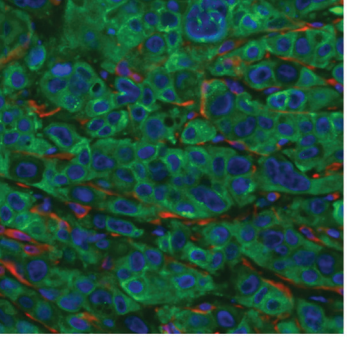

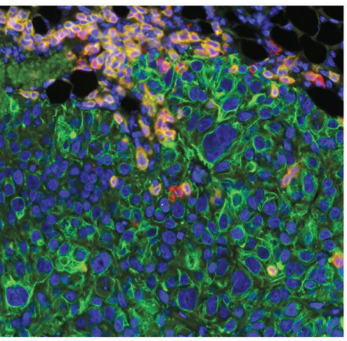

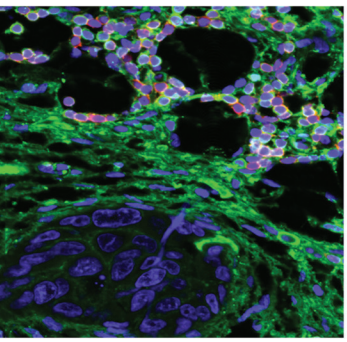

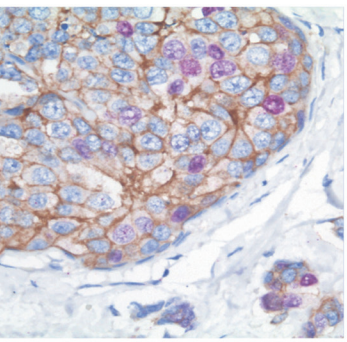

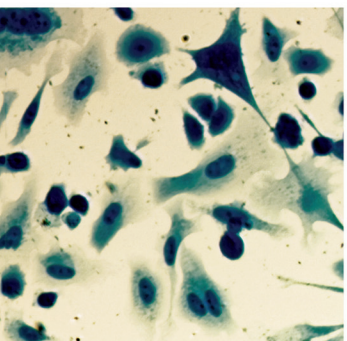

2017-2018 SCIENTIFIC CONFERENCES

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

Third CRI-CIMT-EATI-AACR International Cancer Immunotherapy Conference
Conference Cochairs: Stanley Riddell, Robert D. Schreiber, Christoph Huber, and Guido Kroemer
September 6-9, 2017 | Mainz/Frankfurt, Germany

Advances in Modeling Cancer in Mice: Technology, Biology, and Beyond
Conference Cochairs: Cory Abate-Shen, Kevin M. Haigis, Katerina A. Politi, and Julien Sage
September 24-27, 2017 | Orlando, FL

Tenth AACR Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved
Conference Cochairs: John M. Carethers, Rick A. Kittles, Christopher I. Li, and Electra D. Paskett
September 25-28, 2017 | Atlanta, GA

Tumor Immunology and Immunotherapy
Conference Cochairs: James P. Allison, Carl H. June, Miriam Merad, and Giorgio Trinchieri
October 1-4, 2017 | Boston, MA

Addressing Critical Questions in Ovarian Cancer Research and Treatment
Conference Cochairs: Robert C. Bast, Jr., Ursula A. Matulonis, and Anil K. Sood
October 1-4, 2017 | Pittsburgh, PA

Advances in Breast Cancer Research
Conference Cochairs: Myles A. Brown, Tak W. Mak, Ramon E. Parsons, and Laura J. van 't Veer
October 7-10, 2017 | Hollywood, CA

AACR-NCI-EORTC Molecular Targets and Cancer Therapeutics
Scientific Committee Cochairs: Antoni Ribas, James L. Gulley, and Charles Swanton
October 26-30, 2017 | Philadelphia, PA

New Horizons in Cancer Research
Conference Cochairs: Nancy E. Davidson, Kornelia Polyak, Chi Van Dang, Hongyang Wang
November 6-9, 2017 | Shanghai, P.R. China

Prostate Cancer: Advances in Basic, Translational, and Clinical Research
Conference Cochairs: Johann S. de Bono, Karen E. Knudsen, Peter S. Nelson, and Mark A. Rubin
December 2-5, 2017 | Orlando, FL

Pediatric Cancer
Conference Cochairs: Peter C. Adamson, Nada Jabado, and Charles W. M. Roberts
December 3-6, 2017 | Atlanta, GA

San Antonio Breast Cancer Symposium Presented by CTRC-AACR-BCM
Codirectors: Carlos L. Arteaga, Virginia G. Kaklamani, and C. Kent Osborne
December 5-9, 2017 | San Antonio, TX

Obesity and Cancer
Conference Cochairs: Lewis C. Cantley, Michael N. Pollak, and Elizabeth A. Platz
January 27-30, 2018 | Austin, TX

Immunobiology of Primary and Metastatic CNS Cancer: Multidisciplinary Science to Advance Cancer Immunotherapy
Conference Cochairs: Hideho Okada, Robyn S. Klein, Ignacio Melero, and Patricia S. Steeg
February 12-15, 2018 | San Diego, CA

Targeting DNA Methylation and Chromatin for Cancer Therapy
Conference Cochairs: Stephen B. Baylin, Margaret A. Goodell, and Peter A. Jones
March 1-4, 2018 | Atlanta, GA

AACR Annual Meeting 2018
Program Committee Chair: Elaine R. Mardis
April 14-18, 2018 | Chicago, IL

Learn more and register at
AACR.org/Calendar

AACR American Association for Cancer Research
FINDING CURES TOGETHER®

Associate Editor Position Available

Cold Spring Harbor Laboratory, a world-renowned scientific research facility on Long Island's North Shore, is searching for a scientist interested in the communication of science to fill the position of Associate Editor at *Genome Research*, a journal that publishes advances in genome biology and genomic medicine. *Genome Research* is among the ten most highly cited research journals in biochemistry and molecular biology.

The applicant must have a Ph.D. in genetics or genomic science, preferably with experience in scientific publishing. Strong communication, problem solving and organizational skills, ability to meet deadlines, and the capacity to handle multiple projects at once are significant requirements. An understanding of data reproducibility, deposit and access issues would be helpful. We seek a team player with excellent interpersonal skills.

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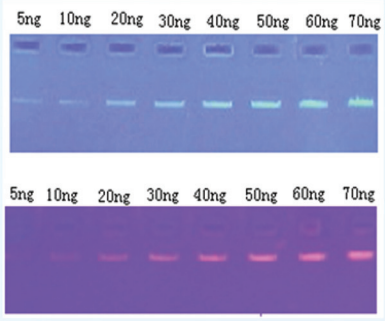
GoodView™ Nucleic Acid Stain

——An alternative to EB

GoodView™ is a new nucleic acid stain, an alternative to the traditional ethidium bromide (EB) stain for detecting nucleic acid in agarose gels. It emits green fluorescence when bound to DNA or RNA. This new stain has two fluorescence excitation maxima when bound to nucleic acid, one centered at 268 nm and another at 294 nm. In addition, it has one visible excitation at 491 nm. The Fluorescence emission of GoodView™ bound to DNA is centered at 530 nm.

Comparative sensitivity test of GV and EB



Sensitivity test result of GV at UV 300nm.

Sensitivity test result of EB at UV 300nm.

The result of electrophoresis demonstrates GV is almost as sensitive as EB.

The Test Report from Institute for Environmental Health and Related Product Safety of Chinese Center for Disease Control and Prevention concludes that:

- Acute Oral Toxicity Test: GoodView™ Nucleic Acid Stain belongs to nontoxic.
- Mouse Marrow Chromophilous Erythrocyte Micronucleus Test: Negative. There is no significant difference in the incidence of micronuclei between test and control groups.
- Ames Test: Negative. No mutagenicity was observed.
- In Vitro Mammalian Cell Chromosome Aberration Test: Negative. No increasing aberration rate was observed.

The test report is available upon request.

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