



Gene panels on demand, how and when you want them

Ion AmpliSeq On-Demand Panels help you get more from targeted next-generation sequencing

- **Now more selection**—build custom panels from a growing catalog of **over 5,000 pretested genes** most relevant in inherited disease research*
- **Now more sizes**—order the exact quantity you need: 8, 24, 32, and 96 reactions per pack

With practical pack sizes that help lower up-front cost, and a powerful content selection engine that automates optimal gene selection, Ion AmpliSeq™ On-Demand Panels help you do targeted sequencing in your own lab, your own way.

Do targeted sequencing your way at ampliseq.com

Learn more at thermofisher.com/ampliseqondemand



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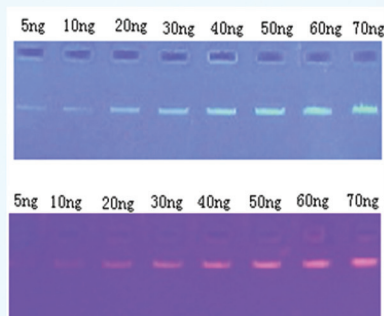


GoodView™ Nucleic Acid Stain

—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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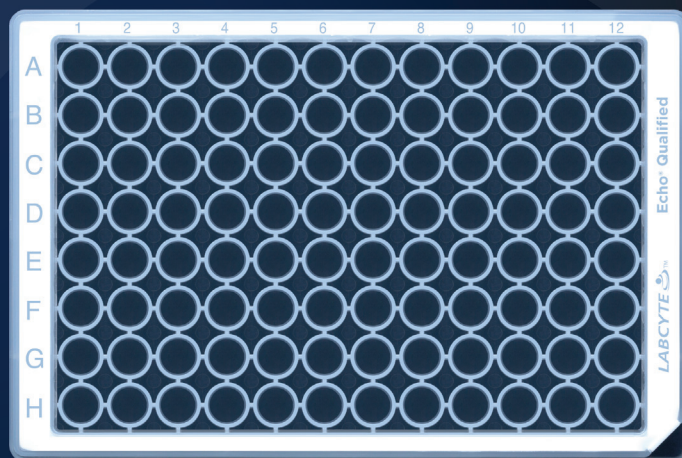
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Coming soon...



96 New Reasons to Buy an Echo® Liquid Handler

Introducing the Echo® Qualified 96-well Microplate

A favorite for genomics applications, the Echo® 525 Liquid Handler saves reagents, sample, and time. Transfer of nanoliter volumes with high accuracy and precision enables assay miniaturization while maintaining data quality. Coming soon, Echo Qualified 96-well Microplates will link the unsurpassed performance of the Echo System with upstream sample preparation steps performed in a 96-well format.

- Qualified by Labcyte for reproducible acoustic performance
- High transparency with high contrast well locators for quick sample identification
- Compatible with the Echo 525 Liquid Handler

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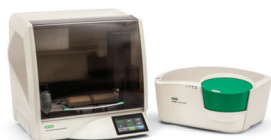
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The AACR logo consists of the letters "AACR" in a bold, white, sans-serif font, set against a solid green rectangular background.

American Association
for Cancer Research™

ANNUAL MEETING

2019  ATLANTA

March 29-April 3 | Georgia World Congress Center | Atlanta, GA

The background of the top half of the poster is composed of several large, overlapping geometric shapes in shades of green, blue, and yellow. In the upper right, a green shape contains a white grid pattern. Below this, a blue shape features a photograph of a man in a white lab coat, looking intently at a piece of equipment. To the left of the man, a yellow shape contains a photograph of a person's hands working with a complex, white, branching structure, possibly a model of a biological system. The bottom half of the poster is a solid dark blue band containing white text.

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inspiring cancer research from around the world

Register and save by January 28!

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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 "Integrative Cancer Science • Global Impact • Individualized Patient Care," will be a comprehensive, cutting-edge scientific event that you will not want to miss!

INTEGRATIVE CANCER SCIENCE
GLOBAL IMPACT
INDIVIDUALIZED PATIENT CARE



#AACR19



AACR.org/AnnualMeeting

Introducing

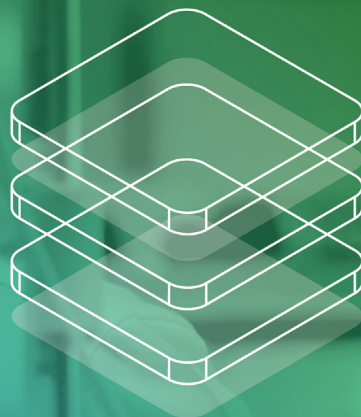


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Engineering**



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2019 CSHL Meetings & Courses

meetings.cshl.edu

aerial view of CSHL sandspit and inner harbor during meeting social

Meetings

Systems Immunology March 13 - 16
Network Biology March 19 - 23
RNA & Oligonucleotide Therapeutics March 27 - 30
Blood Brain Barrier April 3 - 6
Cellular Dynamics & Models April 9 - 12
Ubiquitin, Autophagy & Disease April 23 - 27
Telomeres & Telomerase April 30 - May 4
The Biology of Genomes May 7 - 11
Mechanisms of Metabolic Signaling May 14 - 18
Retroviruses May 20 - 25
84th Symposium: RNA Control & Regulation
May 29 - June 3
Microbiome July 18 - 21
Cell Death August 13 - 17
Eukaryotic mRNA Processing August 20 - 24
Mechanisms of Eukaryotic Transcription August 27 - 31

Eukaryotic DNA Replication & Genome Maintenance
September 3 - 7

Microbial Pathogenesis and Host Response
September 10 - 14

Stem Cell Biology September 17 - 21

Biology of Cancer: Microenvironment & Metastasis
September 24 - 28

Neurobiology of *Drosophila* October 1 - 5

Genome Engineering: Frontiers of CRISPR/Cas
October 10 - 13

Yeast, an Experimental Organism: Past, Present, and Future October 23 - 26

Genome Informatics November 6 - 9

Single Cell Analyses November 13 - 16

Zebrafish Neural Circuits & Behavior November 20 - 23

Plant Genomes, Systems Biology and Engineering
December 4 - 7

Development and 3D Modeling of the Human Brain
December 9 - 12

Spring/Summer Courses

High-Throughput Biology: From Sequence to Networks
March 11 - 17

Cryoelectron Microscopy March 14 - 27

Workshop on Leadership in Bioscience March 22 - 25

Quantitative Imaging: From Acquisition to Analysis
April 2 - 16

Cell & Developmental Biology of *Xenopus* April 3 - 16

Expression, Purification & Analysis of Proteins & Protein Complexes April 3 - 16

Advanced Bacterial Genetics June 4 - 24

Ion Channels in Synaptic and Neural Circuit Physiology June 4 - 24

Mouse Development, Stem Cells & Cancer June 5 - 24

Metabolomics June 8 - 24

Vision: Linking Circuits, Perception and Behavior
June 12 - 26

Statistical Methods for Functional Genomics June 28 - July 11

Advanced Techniques in Molecular Neuroscience
June 28 - July 13

Single Cell Analysis June 28 - July 13

***Drosophila* Neurobiology: Genes, Circuits & Behavior**
June 28 - July 18

Frontiers & Techniques in Plant Science
June 28 - July 18

Neural Data Science July 13 - 26

Synthetic Biology July 23 - August 5

Chromatin, Epigenetics and Gene Expression
July 23 - August 11

Imaging Structure & Function in the Nervous System
July 23 - August 12

Yeast Genetics & Genomics July 23 - August 12

Workshop on Autism Spectrum Disorders
July 29 - August 4

Neuroscience of Addiction August 6 - 12

Proteomics August 7 - 20



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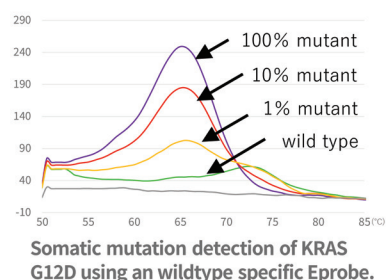
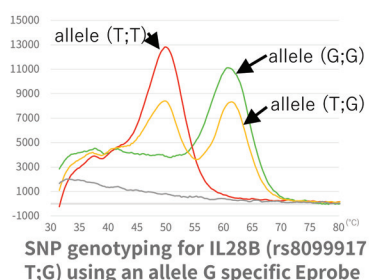
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- **Simple and highly sensitive somatic mutation detection**—sensitive detection of somatic mutations (down to 0.1%) can be achieved by suppression of PCR amplification of wild-type alleles by Eprobe (PCR clamping)
- **Compatible with most real time PCR instruments**—fluorescence emitted by Eprobe can be detected using a filter for SYBR[®] Green I* *SYBR[®] is a registered trademark of Molecular Probes, Inc.
- **Easy to use online design tools**—a design tool for a primer/Eprobe (E-design, www.dnaform.com/edesign2/) and a thermodynamic calculation tool (ECHO, www.dnaform.com/devel/echo/thermodynamics/) are available



Fluorophore (excitation/emission)	1.5 nmol	3.0 nmol	5.0 nmol	10.0 nmol
Thiazole orange (510 nm / 530 nm)	19,000 JPY 38,000 JPY	30,000 JPY 60,000 JPY	45,000 JPY 90,000 JPY	70,000 JPY 140,000 JPY
Thiazole pink (570 nm / 590 nm)	45,000 JPY	70,000 JPY	110,000 JPY	170,000 JPY

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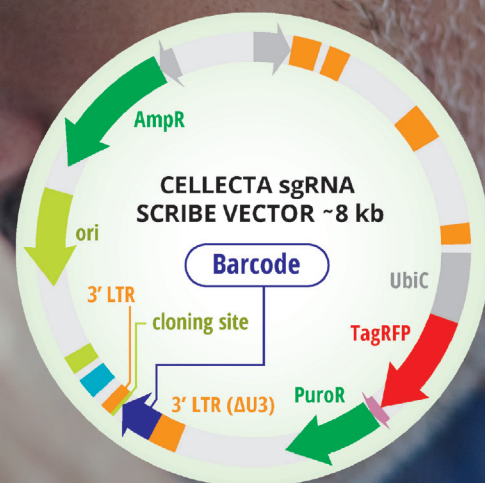
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