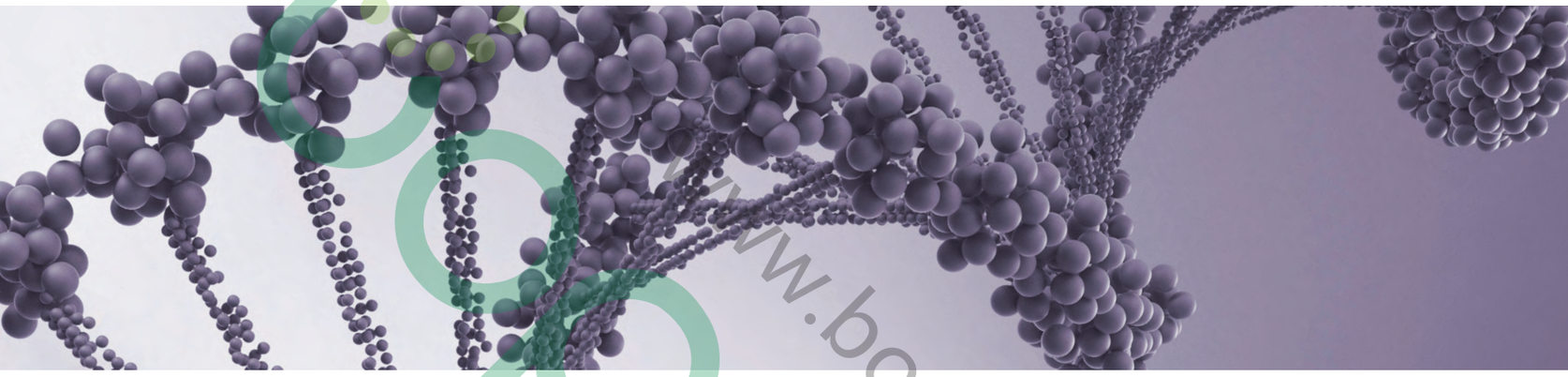
Enzo® Life Sciences

GENOMICS & MOLECULAR BIOLOGY
基因组学&分子生物学



Nucleic Acid Labeling & Amplification
核酸标记&扩增

CGH Labeling Kit for Oligonucleotide Arrays
寡核苷酸阵列比较基因组学杂交标记试剂盒

BioScore™ Screening & Amplification Kit
BioScore™筛选&扩增试剂盒

BioArray® Kits
BioArray® 试剂盒

In situ Hybridization
原位杂交

BioProbe® Labeling Systems
BioProbe® 标记系统

SimplySensitive® & UltraSensitive® Detection Systems
SimplySensitive® &UltraSensitive® 检测系统

PathoGene® HPV Probes
PathoGene® HPV探针

Modified Nucleotides
核苷酸修饰

Deoxynucleotides
脱氧核苷酸

Dideoxynucleotides
双脱氧核苷酸

Ribonucleotides
核苷酸

DNA Damage & Content Analysis
DNA损伤&含量分析

DNA Damage ELISA Kit
DNA损伤ELISA试剂盒

Comet SCGE Assay Kit
彗星电泳分析法

Nuclear-ID® Cell Cycle Analysis Kits
Nuclear-ID® 细胞周期分析试剂盒

scientists ***enabling*** scientists.

www.boppard.cn 宝柏·中国

Enzo®
Life Sciences
scientists ***enabling*** scientists.

全国代理
boppard
宝柏·中国
www. boppard.cn
info@boppard.cn
北京 Tel: 010 85804838
上海 Tel: 021 62884751
广州 Tel: 020 87326381
香港 Tel: 852 27999019

For local distributors and detailed product information visit us online:
www.enzolifesciences.com

Global Research, Global Reach.™

www.boppard.cn
boppard 宝柏·中国

CONTENTS

www.boppard.cn
博帕德中国

CLEAR RESULTS WITH INNOVATIVE NUCLEIC ACID LABELING

Enabling Solutions for Genomics Analysis

Enzo Life Sciences is a recognized pioneer and innovator of life sciences tools, backed by patented DNA and RNA labeling chemistries for genomics research and development. The pillar of our molecular biology portfolio is our array-based comparative genomic hybridization (aCGH) kit, a powerful platform for detecting DNA copy number gains and losses associated with chromosome abnormalities. aCGH provides a greater understanding and characterization of genetic disorders, cancers, and other genomic aberrations.

Supporting our aCGH kits are a variety of everyday-use molecular biology products designed to maximize the quantity and quality of data generated from your valuable samples. These include RNA and DNA amplification kits, as well as labeling systems and modified nucleotides designed for creating biotin- or fluorophore-labeled nucleic acid probes for a variety of applications and detection platforms. The products have been specifically designed to provide optimal performance in nick translation reactions or with microarrays.

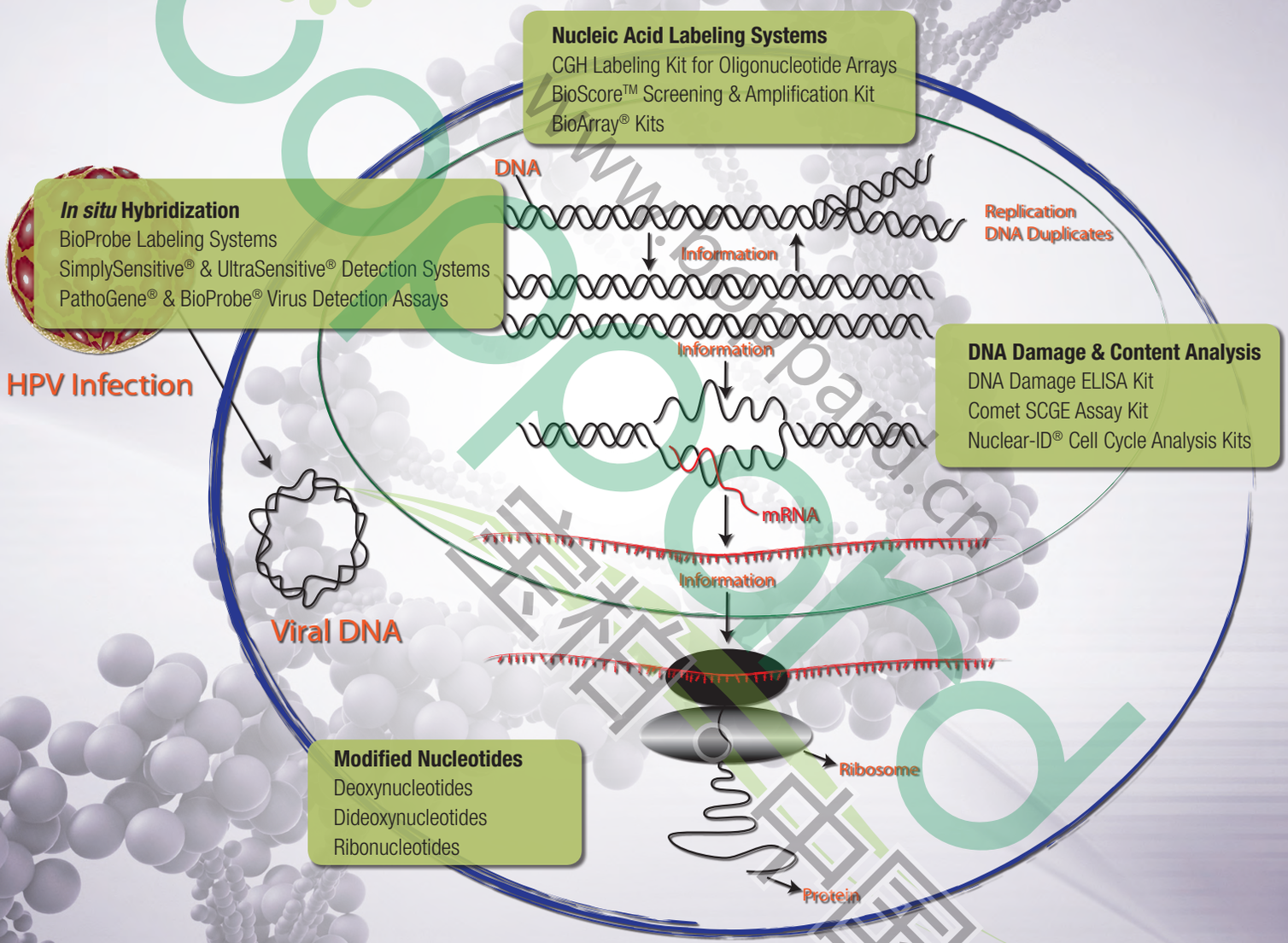
Our panel of PathoGene® kits provides high-specificity probes used to classify human papillomavirus (HPV) genotypes in tissue sections by ***in situ*** hybridization. Flexible SimplySensitive® and UltraSensitive® detection systems are optimized for use with biotin-labeled probes for *in situ* detection of specific endogenous or pathogen-expressed genes.

Cellular responses to DNA damage constitute one of the most important fields in cancer biology. DNA damage kits are fast and sensitive assays that monitor response to reactive oxygen species (ROS) and their impact on nucleotide bases and single- and double-stranded DNA breaks.

Molecular biologists needed reliable fluorescent nucleic acid labeling systems
... we invented them.

www.boppard.cn 博普·中国

Enzo's pioneering work in genomic analysis coupled with an extensive patent estate and enabling platforms have strategically positioned the company to play an important role in the rapidly growing life sciences and molecular medicine marketplaces.



www.easypard.cn

For detailed product information visit us online:
www.enzolifesciences.com

CGH LABELING KIT FOR OLIGONUCLEOTIDE ARRAYS

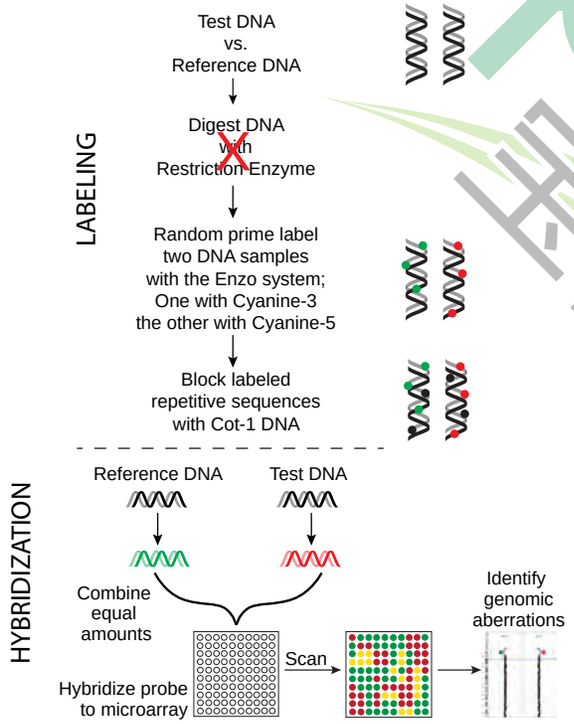
Exceptional CGH labeling kits deliver superior results for better understanding of genetic disorders, cancers and other diseases caused by genomic DNA copy number variations

Array-based comparative genomic hybridization (aCGH) is a powerful tool for detecting gene copy number gains and losses associated with chromosome abnormalities. Detecting chromosomal aberrations by aCGH is faster, more robust and provides superior results over other technologies such as FISH and G-banding karyotyping, thus providing a greater understanding of the role of chromosomal changes in genetic diseases and cancers.

The proprietary labeling technology and high-performance dyes incorporated into our aCGH kits enhance performance with commonly implemented microarray platforms (e.g., Agilent® arrays). Superior labeling technology results in more uniform dye incorporation so that comparisons between genomes is done at higher resolution and with improved signal-to-noise ratios. High quality data provides fewer errors (false positive or false negative) and less time with manual analysis of the data, thereby increasing efficiencies.

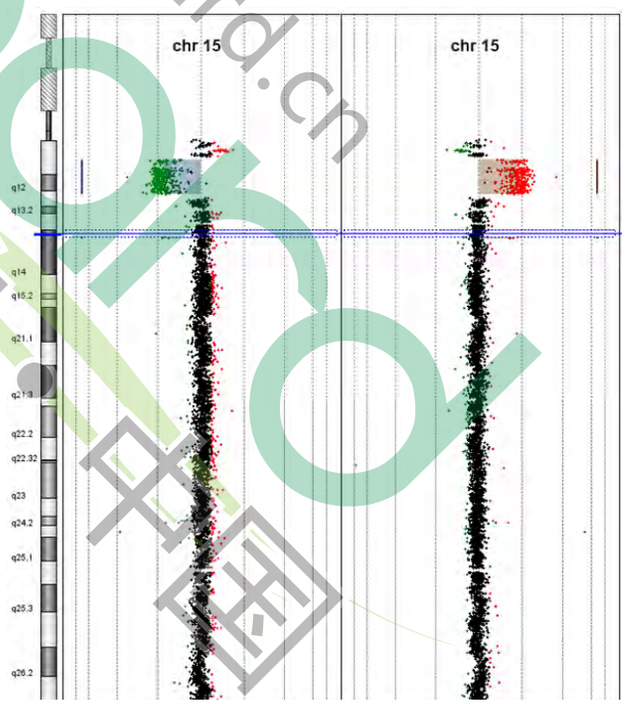
- Enzo's proprietary labeling technology generates the highest quality DLR scores (0.09-0.12) exceeding industry standards, increasing accuracy of variant detection, minimizing manual data analysis, increasing efficiency, and reducing overall sample analysis time
- Increased resolution for comprehensive, unbiased analysis of DNA copy number changes
- Performs total genomic DNA analysis without amplification or complexity reduction
- Proprietary labeling technology generates the highest specific activity of labeling

Optimized Protocol Saves Time



Enzo's CGH protocol requires no DNA digestion or restriction enzymes, saving time and preventing DNA loss during restriction enzyme cleanup.

Superior Labeling Delivers Clear & Accurate Data Analysis



Analysis of syndromic DNA using an oligonucleotide microarray (Agilent 4x180K) demonstrated the characteristic deletion in 15q11.2-q13 (chromosome 15) found in patients with Prader-Willi syndrome.

www.boppard.cn

Optimized Labeling Enables Proven, Consistent Results

Enzo's proprietary labeling technology delivers excellent DNA yields with superior dye incorporation leading to the highest specific activity of labeling.

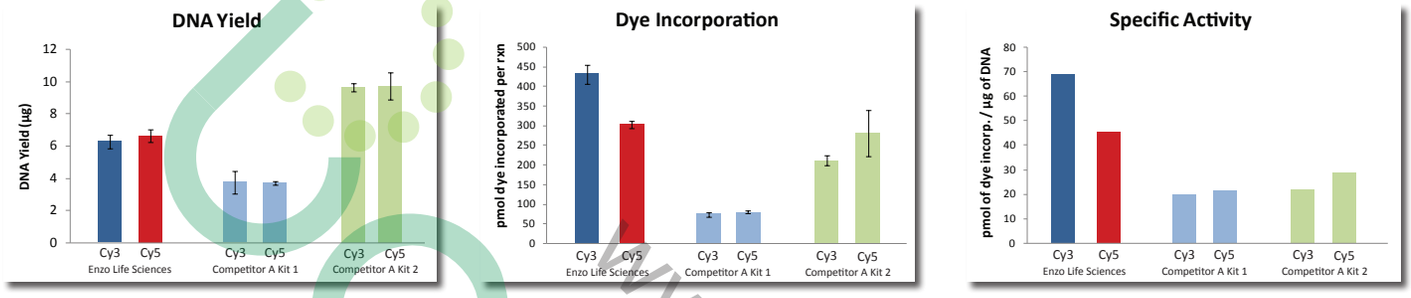


Figure 1: Four replicate 500-ng DNA samples were labeled with Enzo's CGH Labeling Kit for Oligo Arrays or a leading competitor's kits. Enzo's proprietary labeling technology generates the highest specific activity of labeling.

Superior Performance Enables Efficiency

Low variability combined with high signal intensity and low background, increase accuracy of variant detection, minimizing manual data analysis — increasing efficiency and reducing the need for experimental repeats.

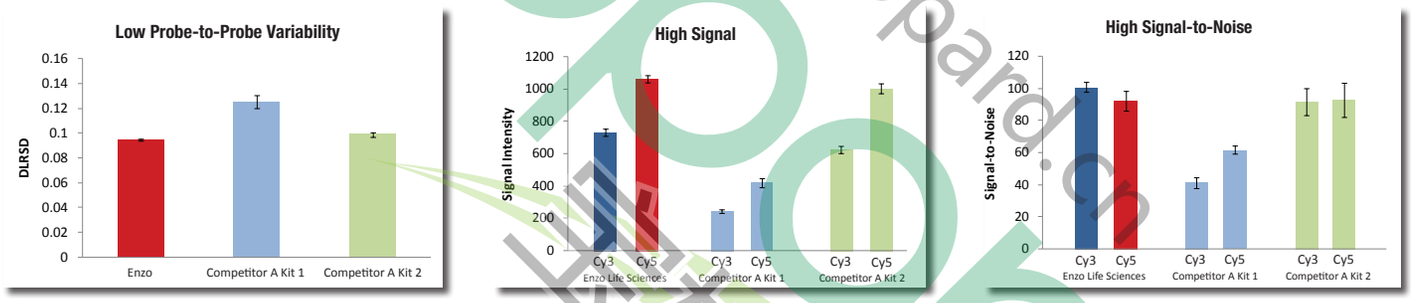


Figure 2: Four replicate 500-ng DNA samples were labeled with Enzo's CGH Labeling Kit for Oligo Arrays or a leading competitor's kits. The samples were then hybridized to an Agilent® 4x180K microarray. Enzo's low probe variability, high signal intensity and high signal-to-noise values demonstrates excellent hybridization performance.

References:

Salivary Gland Carcinosarcoma

1. Vékony, H *et.al.* Salivary gland carcinosarcoma: Oligonucleotide array CGH reveals similar genomic profiles in epithelial and mesenchymal components. Oral Oncology (2009) 45, 259– 265.

Metastatic Melanoma

2. Moore, S *et.al.* Detection of Copy Number Alterations in Metastatic Melanoma by a DNA Fluorescence In situ Hybridization Probe Panel and Array Comparative Genomic Hybridization: A Southwest Oncology Group Study (S9431). Clin Cancer Res 2927 2008;14(10).

Postnatal testing for Genome Imbalance

3. Ahn *et.al.* Validation and implementation of array comparative genomic hybridisation as a first line test in place of postnatal karyotyping for genome imbalance. Molecular Cytogenetics 2010, 3:9.

Discovery of Tumor Suppressor Genes and Oncogenes

4. Protopopov, A *et.al.* Full Complexity Genomic Hybridization on 60-mer Oligonucleotide Microarrays for Array Comparative Genomic. Methods in Molecular Biology, 2008, Volume 439, 87-100, DOI: 10.1007/978-1-59745-188-8_6

Uveal Melanoma

5. Worley, LA *et.al.* Transcriptomic versus Chromosomal Prognostic Markers and Clinical Outcome in Uveal Melanoma. Clin Cancer Res. 2007 Mar 1;13(5):1466-71.

Solitary Median Maxillary Central Incisor Syndrome

6. Szakszon, K *et.al.* Endocrine and anatomical findings in a case of Solitary Median Maxillary Central Incisor Syndrome. Volume 55, Issue 2, February 2012. 109-111.

Product	Product #	Size
CGH Labeling Kit for Oligo Arrays	ENZ-42671-K010	2 x 10 reactions
CGH Labeling Kit for Oligo Arrays	ENZ-42671-K100	2 x 100 reactions
CGH Labeling Kit for BAC Arrays	ENZ-42670	2 x 10 reactions
BioScore™ Screening & Amplification Kit	ENZ-42440	20 reactions

www.boppard.cn 博宾·中国

BIOSCORE™ SCREENING & AMPLIFICATION KIT

Avoid wasting expensive microarrays and labeling kits on poor quality DNA with the BioScore™ Screening and Amplification Kit.

Dual-purpose BioScore™ Screening and Amplification kit utilizes a novel whole genome amplification (WGA) method to identify genomic DNA samples that are suitable for microarray analysis prior to labeling and to predict sample performance with virtually 100% predictability. The kit discriminates FFPE DNA quality based on the yield of amplification product produced in one-hour via an isothermal WGA reaction that is capable of generating more than 10 µg of DNA from 100 ng high-quality template DNA (isolated starting material). Genomic DNA isolated from any source can serve as the template in an amplification reaction.

DNA quality is scored as Poor, Intermediate, Good, or Excellent. Samples that amplify in the Poor range are not suitable for microarray analysis. Intermediate or Good FFPE samples can be directly labeled using our CGH Labeling kits.

- Direct, unbiased and uniform whole genome DNA amplification from FFPE samples for microarray analysis
- Predicts FFPE sample performance on microarrays with virtually 100% concordance
- Generate higher DNA yields and improved signal-to-background ratios on arrays for more accurate data interpretation
- Rapid, semi-quantitative results in 1 hour

Predict FFPE Sample DNA Quality with Confidence

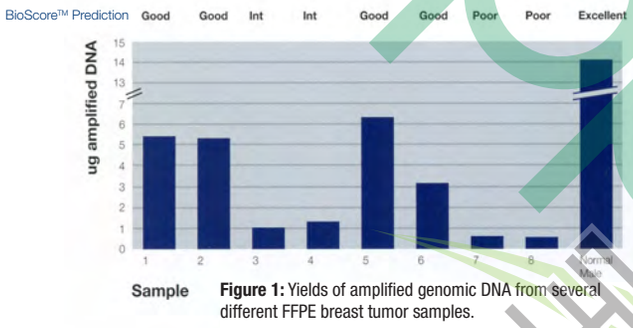


Figure 1: Yields of amplified genomic DNA from several different FFPE breast tumor samples.

Results from BioScore® Screening and Amplification Kit (FFPE-isolated tissue)

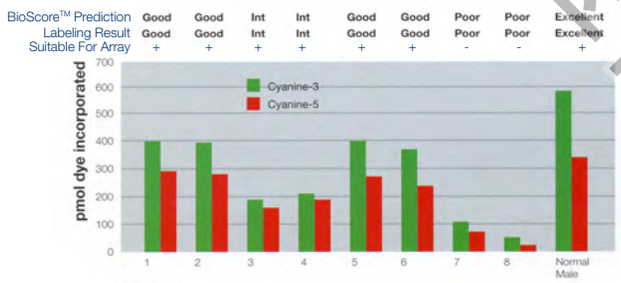


Figure 2: Incorporation of cyaninie-modified nucleotides into genomic DNA from several different FFPE breast tumor tissue samples.

Results from CGH Labeling Kit for Oligo Arrays (FFPE-isolated tissue)

References:

1. Robert A.A. van Boerdonk, *et.al.* DNA Copy Number Alterations in Endobronchial Squamous Metaplastic Lesions Predict Lung Cancer. AJRCCM Articles in Press. July 28, 2011 as doi:10.1164/rccm.201102-0218OC.
2. Liaqat Ali, *et.al.* Correlating array comparative genomic hybridization findings with histology and outcome in spitzoid melanocytic neoplasms. Int J Clin Exp Pathol. 2010; 3(6): 593–599.
3. Oscar Krijgsman *et.al.* High-resolution copy number profiling by array CGH using DNA isolated from formalin-fixed, paraffin-embedded tissues. Methods MolBiol. 2012;838:329-41.

Product	Product #	Size
CGH Labeling Kit for Oligo Arrays	ENZ-42671	2 x 10 or 100 reactions
CGH Labeling Kit for BAC Arrays	ENZ-42670	2 x 10 reactions
BioScore™ Screening and Amplification Kit	ENZ-42440	20 reactions

www.boppard.cn

Improved data quality and analysis results through greater biotin incorporation with the Single Round RNA Amplification and Biotin Labeling System for transcriptional analysis

Biotin-labeled antisense RNA (aRNA) is generated from total cellular RNA samples in less than 24 hours. Incorporation of two biotin nucleotides yields brighter signal, improving data from microarray experiments.

- Convenient workflow with a flexible 4-16 hour transcription time and reagents supplied in a ready-to-use format
- Decrease experimental variation, and standardize data derived from microarrays
- Maintain the value of legacy data by the continued use of the gold standard for GeneChip® visualization
- Enables correlation of results from experiment-to-experiment, project-to-project and lab-to-lab.
- Production of large amounts of biotin-labeled RNA targets by *in vitro* transcription from bacteriophage T7 RNA polymerase promoters is available separately with our BioArray HighYield® RNA Transcript Labeling Kits

"…our results indicate that the Enzo kit is the best choice for routine Affymetrix GeneChip experiments."

- http://www.expression-analysis.com/scientific_library/technical_notes/

References:

1. Rosen, MB *et.al.* Gene Expression Profiling in Wild-Type and PPARα-Null Mice Exposed to Perfluorooctane Sulfonate Reveals PPARα-Independent Effects. PPAR Research Volume 2010, Article ID 794739, doi:10.1155/2010/794739.
2. Grosheva, I *et.al.* Caldesmon effects on the actin cytoskeleton and cell adhesion in cultures HTM cells. Experimental Eye Research. Volume 82, issue 6, June 2006, 945-958.

Analyze limiting quantities of total RNA with the BioArray® Low Input RNA Amplification and Biotin Labeling System for transcript analysis

- Generates sufficient aRNA for standard microarray analysis from as little as 20 ng of total input RNA.
- Entire amplification reaction can be performed in a single tube.
- Superior 3'/5' transcript ratios demonstrating efficient *in vitro* transcription.
- Biotin-labeled aRNA can be purified using either magnetic beads or purification columns and reagents

As little as 20 ng total RNA input produces sufficient amounts of aRNA for microarrays

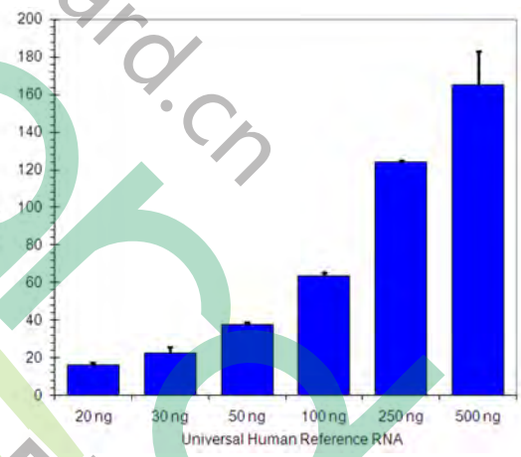


Figure 1: Universal Human Reference RNA ranging from 20ng to 500ng was amplified in triplicate using BioArray® Low Input RNA Amplification and Biotin Labeling System. The lowest amount of input (20ng) generated enough labeled aRNA for microarray analysis.

BioArray® 3´-OH Terminal Labeling is the recognized benchmark standard for biotin-labeling of DNA

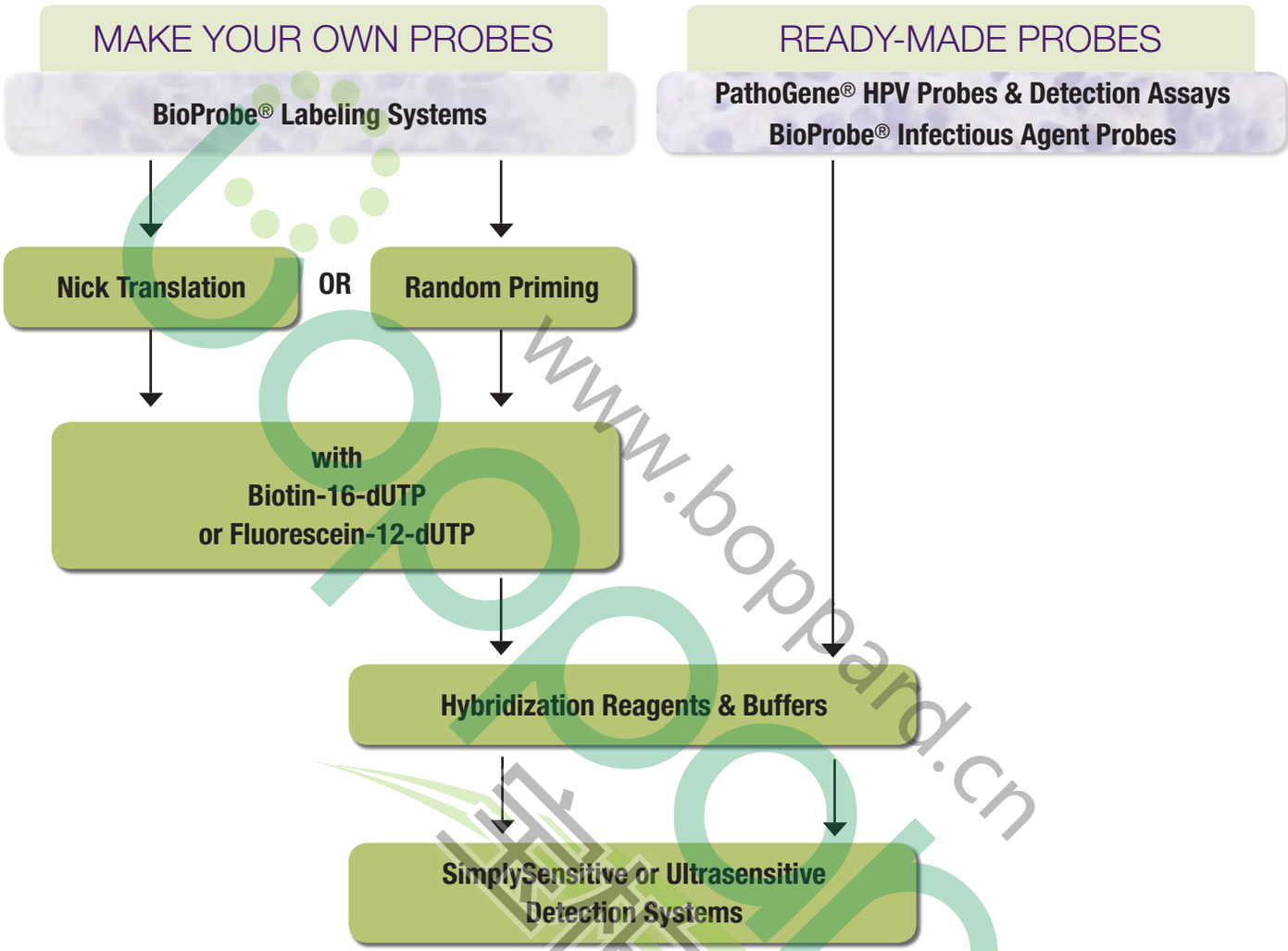
The kit is considered the gold standard end-labeling system for use with Affymetrix® DNA SNP (single nucleotide polymorphism), resequencing and prokaryotic microarrays. This method uses Bio-ddUTP and terminal deoxynucleotide transferase to catalyze the addition of a single biotin-ddUMP (2',3'-dideoxyuridine 5'-monophosphate) to the 3'-OH terminus of an amplified and fragmented target DNA molecule.

References:

1. Akiyama, M *et.al.* Analysis of telomerase activity and RNA expression in a patient with acute promyelocytic leukemia treated with all-trans retinoic acid. Pediatric Blood & Cancer. Volume 46, Issue 4, 2006, 506-511.

Product	Product #	Size
Single Round RNA Amplification and Biotin Labeling System	ENZ-42420-10	10 Reactions
	ENZ-42421-100	100 reactions
BioArray® Low Input RNA Amplification and Biotin Labeling System	ENZ-42422	10 reactions
BioArray HighYield® RNA Transcript Labeling Kit	ENZ-42655	10, 20, 40, 100 Reactions
BioArray® cDNA Synthesis Kit	ENZ-42406	10 reactions
BioArray® 3´-OH Terminal Labeling	ENZ-42630	25 Reactions
BioArray® Eukaryotic Hybridization Controls	ENZ-42661	30, 50 Reactions

www.boppard.cn 博科国际



A complete BioProbe® Random Primed or Nick Translation DNA Labeling System consists of the combination of two separate components: a Reagent Pack (labeling system) and a choice of deoxynucleotide packs for Bio-16-dUTP or Fluorescein-12-dUTP. Once labeling of choice is completed, hybridization is performed with a complete set of reagents, followed by detection with SimplySensitive® or UltraSensitive® Detection Systems.

No time to make your own viral detection probes? Choose from a selection of ready-made, high-sensitivity probes for HPV or infectious agents, hybridize with reagents, and detect with SimplySensitive® or UltraSensitive® Detection systems.

www.boppard.cn

BIOPROBE® LABELING SYSTEMS

Product	Product #	Size
BioProbe® Nick Translation Systems		
Nick Translation Reagent Pack	ENZ-42710	25 reactions
Bio-16-dUTP for Nick Translation (Deoxynucleotide pack)	ENZ-42712	25 reactions
Fluorescein-12-dUTP for Nick Translation (Deoxynucleotide pack)	ENZ-42716	25 reactions
Nick Translation Kit with Biotin-16-dUTP (as a set)	ENZ-42710-12	25 reactions
Nick Translation Kit with Fluorescein-12-dUTP (as a set)	ENZ-42710-16	25 reactions
BioProbe® Random Primed Labeling Systems		
Random Primed Reagent Pack	ENZ-42720	25 reactions
Bio-16-dUTP for Random Priming (Deoxynucleotide pack)	ENZ-42722	25 reactions
Fluorescein-12-dUTP for Random Priming (Deoxynucleotide pack)	ENZ-42726	25 reactions
Random Primed Labeling Kit with Bio-16-dUTP (as a set)	ENZ-42720-22	25 reactions
Random Primed Labeling Kit with Fluorescein-12-dUTP (as a set)	ENZ-42720-26	25 reactions

HYBRIDIZATION REAGENTS & BUFFERS

Product	Product #	Size
Proteinase K	ENZ-33801	2 x 5 mg
Wash Buffer Salts	ENZ-33802	3 packs
SignaSure® Wash Buffer	ENZ-33803	3 packs
In Situ Hybridization Buffer (1.25X concentrate)	ENZ-33808	10 mL
In Situ Hybridization Wash Reagent	ENZ-33809	30 mL

DETECTION SYSTEMS

Product	Product #	Size
SimplySensitive® Hrp-AEC *In Situ* Detection System	ENZ-32830	20 assays
SimplySensitive® Hrp-DAB *In Situ* Detection System	ENZ-32840	20 assays
SimplySensitive® AP-NBT/BCIP *In Situ* Detection System	ENZ-32870	20 assays
UltraSensitive® Enhanced Hrp-AEC *In Situ* Detection System	ENZ-32300	30 assays
UltraSensitive® Enhanced Hrp-DAB *In Situ* Detection System	ENZ-32400	30 assays
UltraSensitive® Enhanced AP-NBT/BCIP *In Situ* Detection System	ENZ-32700	30 assays

www.boppard.cn 博普·中国

PATHOGENE® & BIOPROBE® VIRUS DETECTION ASSAYS

PathoGene® Human Papillomavirus in situ typing assays for sensitive detection of pathogen-expressed genes from fresh or FFPE tissue sections

The assays employ separate mixtures of biotin-labeled Human Papillomavirus (HPV)-specific probes to detect and identify HPV/DNA-infected biopsy tissue sections. The identifying probes are HPV types 6/11 (benign lesions), 16/18 (cervical intraepithelial neoplasia [CIN] and carcinoma in situ [CIS]), or 31/33/51 (condyloma or cervical intraepithelial neoplasia [CIN] and carcinoma in situ [CIS]).

- Provides all reagents and materials for preparation and pretreatment as well as hybridization/detection and typing of HPV DNA.
- Suitable for processing paraffin-embedded tissue manually or on automated slides-stainers.
- HPV 16 Probe Control Slide is available separately to serve as a positive control for HPV-16 DNA detection.

Detect and Identify HPV Infection *In Situ*

CIN/condylomata biopsy specimen infected with HPV type 16 DNA. The HPV 16/18 Probe Reagent exhibited strong nuclear staining Tissue sections were developed with (A) HRP-AEC (100X) and (B) HRP-DAB (400X) and counterstained with hematoxylin.

References:

1. Brown DR, *et. al.* Neutralization of human papillomavirus type 11 (HPV-11) by serum from women vaccinated with yeast-derived HPV-11 L1 virus-like particles: correlation with competitive radioimmunoassay titer.J Infect Dis. 2001 Nov 1;184(9):1183-6.
2. Lajer CB, *et. al.* Different miRNA signatures of oral and pharyngeal squamous cell carcinomas: a prospective translational study. Br J Cancer. 2011 Mar 1;104(5):830-40.
3. Nuovo GJ, *et. al.* Strong inverse correlation between microRNA-125b and human papillomavirus DNA in productive infection. Diagn Mol Pathol. 2010 Sep;19(3):135-43.

PATHOGENE® HPV PROBES & DETECTION ASSAYS

Product	Product #	Size
PathoGene® Alk Phos-NBT/BCIP Human Papillomavirus *In Situ* Typing Assay	ENZ-32895	10 assays
PathoGene® Hrp-AEC Human Papillomavirus *In Situ* Typing Assay	ENZ-32877	20 assays
PathoGene® Hrp-DAB Human Papillomavirus *In Situ* Typing Assay	ENZ-32874	20 assays
PathoGene® Human Papillomavirus *In Situ* Screening Assay	ENZ-32879	20 assays
HPV 16 Control Slide	ENZ-31877	1 slide
PathoGene® Probes		
HPV Screening Probe in hybridization buffer (6/11, 16/18, 31/33/51)	ENZ-32884	1 mL
HPV Type 6/11 Probe	ENZ-32885	1 mL
HPV Type 16/18 Probe	ENZ-32886	1 mL
HPV Type 31/33/51 Probe	ENZ-32887	1 mL

BIOPROBE® INFECTIOUS AGENT PROBES

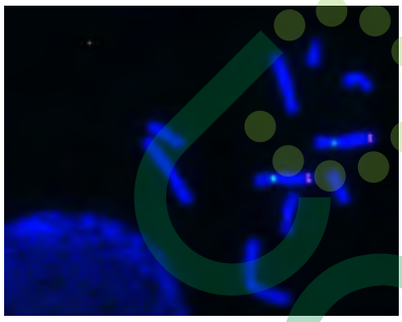
BioProbes® Probes		
Adenovirus	ENZ-40834	2 µg
Cytomegalovirus	ENZ-40835	2 µg
Herpes Simplex	ENZ-40838	2 µg
Hepatitis A Virus	ENZ-40842	2 µg
SV 40	ENZ-40845	2 µg
JC Virus	ENZ-40847	2 µg
BK Vrius	ENZ-40848	2 µg

www.boppard.cn 博帕·中国

NICK TRANSLATION

Fluorescent-labeled dUTPs and Nick Translation System for Preparing FISH Probes

Peak Labeling Performance



Fluorescent dye-dUTPs are well recognized as superior to analogous methods using cumbersome indirect two-step labeling methods. When coupled with the Nick Translation DNA Labeling System, this direct approach provides a simple and efficient method to label DNA for FISH, suitable for a wide range of molecular biology and cytogenetics applications.

- Eight distinct colors to choose from, spanning the visible light spectrum
- High signal intensity and good photostability

Figure 1: Composite fluorescent image using the Nick translation kit and BAC Target DNA labeled with Enzo Orange dUTP (TAMRA) and Centromere BAC Probe labeled with ENZO Green 496 dUTP (FITC). Metaphase chromosome spreads were counterstained with DAPI.

Product	Product #	Size
Nick Translation DNA Labeling System for FISH Probes	ENZ-42910	50 reactions
Gold 550 dUTP	ENZ-42521	25 nmol
Red 650 dUTP	ENZ-42522	25 nmol
Green 496 dUTP	ENZ-42831	25 nmol
Orange 552 dUTP	ENZ-42842	25 nmol
Gold 525 dUTP	ENZ-42843	25 nmol
Red 580 dUTP	ENZ-42844	25 nmol
Green 500 dUTP	ENZ-42845	25 nmol
Aqua 431 dUTP	ENZ-42853	25 nmol
Deoxynucleotides		
Allylamine-dUTP	ENZ-42861	2.5 µmol
Bio-16-dUTP	ENZ-42811	50 nmol
Bio-7-dATP	ENZ-42819	50 nmol
Cyanine-3-dUTP	ENZ-42501	25 nmol
Cyanine-5-dUTP	ENZ-42502	25 nmol
Dideoxynucleotides		
Bio-N^6-ddATP	ENZ-42809	25 nmol
Bio-16-ddUTP	ENZ-42813	25 nmol
Fluorescein-12-ddUTP	ENZ-42833	25 nmol
Ribonucleotides		
Bio-11-CTP	ENZ-42818	250 nmol
Bio-16-UTP	ENZ-42814	250 nmol
Bio-16-UTP	ENZ-42814B	2 µmol
Bio-17-ATP	ENZ-42817	250 nmol
Cyanine-3-UTP (enhanced)	ENZ-42505	250 nmol
Cyanine-5-UTP (enhanced)	ENZ-42506	250 nmol
Fluorescein-12-UTP	ENZ-42834	250 nmol

www.boppard.cn 博帕·中国

DNA DAMAGE & CONTENT ANALYSIS

DNA DAMAGE ELISA KIT

Rapidly monitor DNA destruction arising from cancer, apoptosis and oxidative stress using the DNA Damage ELISA kit

The DNA Damage ELISA (enzyme-linked immunosorbent assay) is a fast and sensitive immunoassay providing results in less than 2.5 hours. Quantitation of 8- hydroxy-2'-deoxyguanosine (8-OHdG) in urine, serum, and saliva samples is performed in a convenient 96-well plate format using a colorimetric substrate. 8-OHdG is a frequently-used critical biomarker of oxidative stress and carcinogenesis.

- Quantify levels < 1 ng/ml
- Validated in-house in a variety of sample matrices
- Tested in a variety of biofluids (urine, serum, and saliva)
- Convenient colorimetric 96-well plate format

Typical 8-OHdG Standard Curve

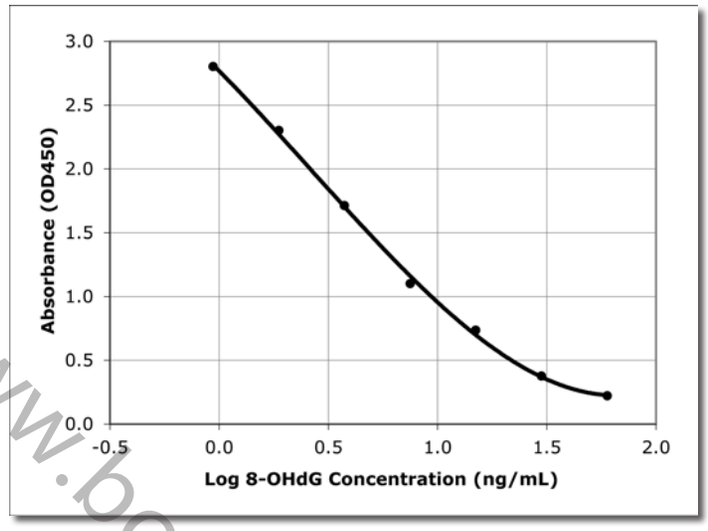


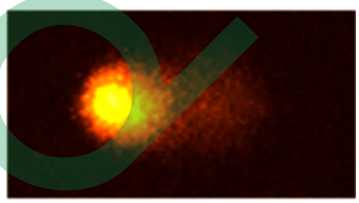
Figure 1: The standard curve has a range of 0.94 – 60 ng/mL.

Product	Product #	Size
DNA Damage ELISA Kit	ADI-EKS-350	1 x 96-well plate

COMET SCGE ASSAY KIT

Sensitive and versatile method for measuring single- and double-strand DNA breaks in individual cells.

Exposure of cells to oxidative and environmental stresses frequently results in the breakdown or oxidation of genomic DNA. Assays to evaluate the integrity of genomic DNA, or to assess the presence of oxidized DNA are frequently used as a means of verifying the onset of apoptosis or DNA damage. The Assay Designs COMET SCGE Assay measures DNA damage by fluorescently detecting the integrity of DNA liberated from cells embedded in low melting point agarose. Upon electrophoresis, fragmented DNA produces a characteristic "comet" shaped tail as small DNA fragments migrate in the gel more rapidly than in-tact genomic DNA.



The COMET SCGE Assay is a fast and simple electrophoresis method to detect and quantitate DNA fragmentation in cells associated with DNA damage and apoptosis. A unique nucleic acid stain provides improved sensitivity for DNA visualization compared to ethidium bromide.

- Ready-to-use Comet Slides allow direct application of sample without pretreatment
- Shorter assay time allows for higher throughput sample analysis
- Hydrophobic barrier allows sample treatment with DNA repair enzymes
- Unique nucleic acid stain provides improved sensitivity for DNA visualization compared to ethidium bromide

Product	Product #	Size
Comet SCGE assay kit	ADI-900-166	50 tests

www.boppard.cn

Highly permeable fluorescent dyes for DNA content analysis in live or fixed cells.

- Intercalating dye with superior permeability in live cells
- Dye functional over a wide range of cell densities, incubation time, and temperature eliminating optimization required with other dyes
- Easy no-wash, mix and read protocol
- Dyes excitable with standard 488nm laser

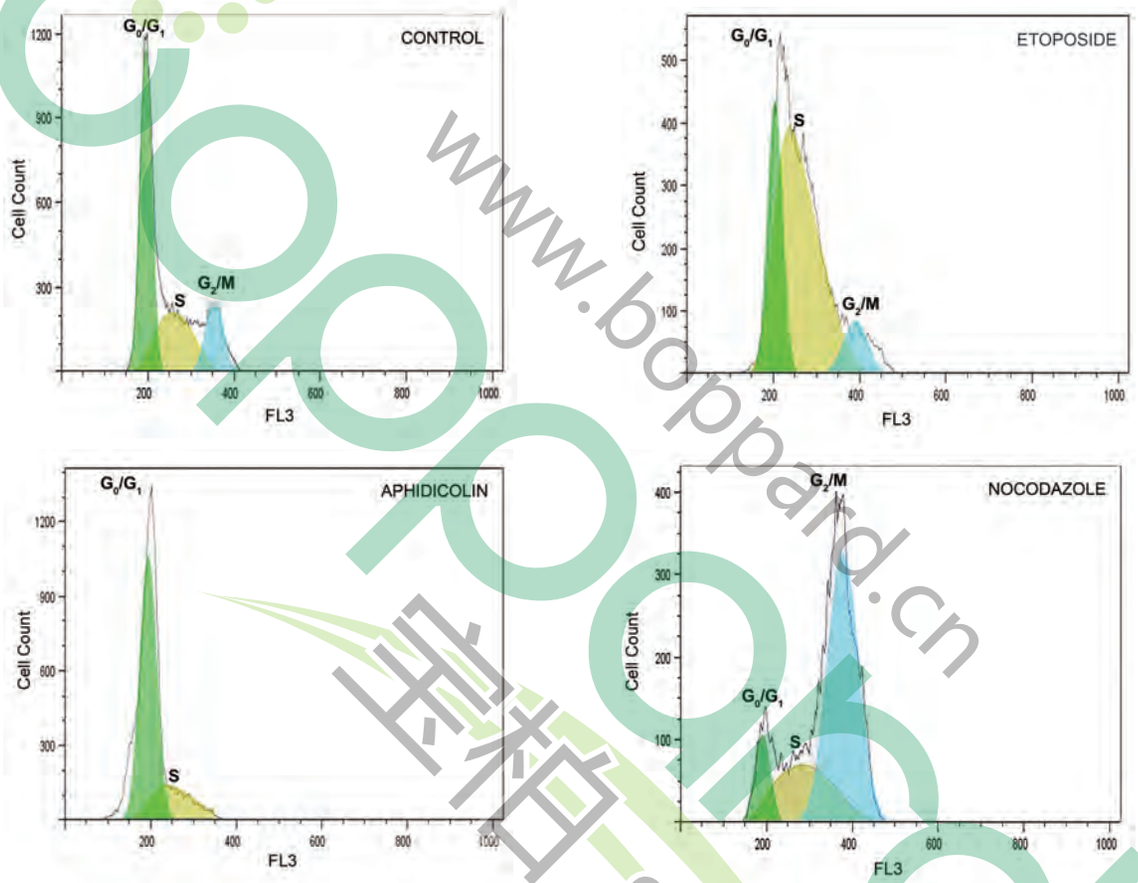


Figure 1: Drug treatments with live cells inhibit cell cycle progression at different phases.

www.boppard.cn

References:

1. Houben R, *et.al.* An intact retinoblastoma protein binding site in merkel cell polyomavirus large T antigen is required for promoting growth of merkel cell carcinoma cells. Int J Cancer. 2011 Mar 16. doi: 10.1002/ijc.26076 GFP-certified® Nuclear-ID® Red Cell Cycle Analysis Kit
2. Xiang, Y, *et.al.* A cell-permeant dye for cell cycle analysis by flow and laser-scanning microplate cytometry. Nature Methods 6. (2009) (Advertising Feature) Nuclear-ID® Red Cell Cycle Analysis Kit, GFP-certified®

Product	Product #	Size
Nuclear-ID® Green Cell Cycle Analysis Kit	ENZ-51014-100	100 Assays
Nuclear-ID® Red Cell Cycle Analysis Kit	ENZ-51008-100	100 Assays

www.boppard.cn
boppard 宝柏·中国

Enzo®
Life Sciences
scientists *enabling* scientists.

全国代理

boppard
宝柏·中国

www. boppard.cn
info@boppard.cn
北京 Tel: 010 85804838
上海 Tel: 021 62884751
广州 Tel: 020 87326381
香港 Tel: 852 27999019

For local distributors and detailed product information visit us online:
www.enzolifesciences.com

ALEXIS® assay designs® BIOMOL® INTERNATIONAL Stressgen®