# DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe Assay

# Enzo probes are fluorescently-labeled DNA probes provided in a ready-to-use format.

DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe Assay contains fluorescently labeled nucleic acid probes for use in in situ hybridization to detect the most frequently encountered chromosomal abnormalities in bladder cancer cells. This includes three chromosome enumeration probes targeted to specific alpha satellite regions within the centromeres of chromosomes 3, 7, and 17. These probes, namely CEN 3 (red), CEN 7 (green), and CEN 17 (aqua), allow for rapid determination of chromosomal aneuploidy that is commonly found in bladder cancer cells. The fourth probe, CDKN2A (gold), targets the 9p21 locus enabling the detection of deletions or alterations of the tumor suppressor gene CDKN2A, also known as p16 or p16INK4a. Loss of this tumor suppressor gene often occurs in a wide variety of human tumors including bladder carcinoma. Hybridization of a target DNA specimen with Enzo's DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe produces bright and intense red, green, aqua and gold fluorescent signals, which enables the direct visualization of chromosomal aberrations in chromosome 3, 7, 17 and the 9p21 locus, respectively.

- The CDKN2A specific FISH probe is optimized to detect chromosome 9 at 9p21.3 on urinary bladder carcinoma cell lines from Homo sapiens
- The chromosome 3 specific centromere enumeration (CEN) FISH probe is optimized to detect alpha satellite sequences in the centromere of chromosome 3 at 3p11.1--3q11.1 on urinary bladder carcinoma cell lines from *Homo sapiens*
- The chromosome 7 specific centromere enumeration (CEN) FISH probe is optimized to detect alpha satellite sequences in the centromere of chromosome 7 at 7p11.1--7q11.1 on urinary bladder carcinoma cell lines from *Homo sapiens*
- The chromosome 17 specific centromere enumeration (CEN) FISH probe is optimized to detect alpha satellite sequences in the centromere of chromosome 17 at 17p11.1--17q11.1 on urinary bladder carcinoma cell lines from *Homo sapiens*

- Contains DEEPSEE<sup>®</sup>
   CDKN2A/CEN3/7/17 Quad Probe and SEEBRIGHT<sup>®</sup> Mounting

   Medium with DAPI
- Provides bright and intense signals with low background
- Antifade formulation of mounting medium enhances and preserves signals

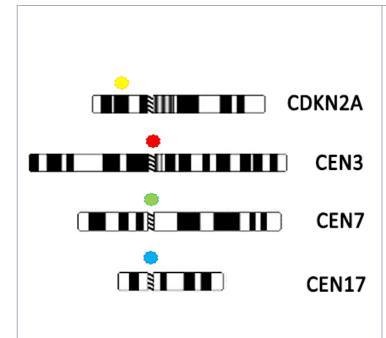
**Ordering Information** 

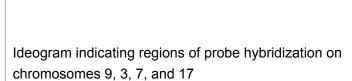
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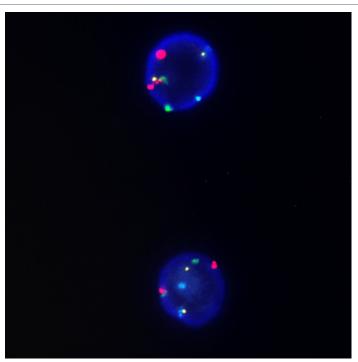
ENZ-GEN440-0020	20 tests
ENZ-GEN440-0100	100 tests

Manuals, SDS & CofA

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Normal cells in a cytological specimen shows two gold (CDKN2A), two red (chromosome 3), two green (chromosome 7) and two aqua (chromosome 17) signals after overnight hybridization with the DEEPSEE(R) CDKN2A/CEN3/7/17 Quad Probe

## **Handling & Storage**

Use/Stability Store DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe at -20°C. Store SEEBRIGHT®

Mounting Medium with DAPI at 4°C. Store Surfactant and 20X SSC at room

temperature. Stable for at least one year after receipt when stored as recommended.

**Handling** Protect from light. Avoid freeze/thaw cycles.

Shipping Blue Ice

# Regulatory Status RUO - Research Use Only

### **Product Details**

Alternative Name CDKN2A/CEN3/7/17 Quadruple Probe

**Application** FISH, Fluorescent detection

Contents -0020 size:

ENZ-GEN410: DEEPSEE® CDKN2A/CEN3/7/17 Quad

Probe, 1 x 100 µl (20 tests)

ENZ-GEN420: SEEBRIGHT® Mounting Medium with

DAPI, 1 x 200 µl (20 tests)

ENZ-GEN425: Surfactant, 1 x 4mL

ENZ-GEN426: 20X SSC, 1 x pouched to make 250mL

-0100 size:

ENZ-GEN410: DEEPSEE® CDKN2A/CEN3/7/17 Quad

Probe, 1 x 500 µl (100 tests)

**ENZ-GEN420**: SEEBRIGHT® Mounting Medium with

DAPI, 1 x 1000 µl (100 tests) **ENZ-GEN425:** Surfactant, 1 x 4mL

ENZ-GEN426: 20X SSC, 1 x pouched to make 250mL

CEN 3 FISH probe is labeled with Red dye (Ex 592 nm/

Em 605 nm)

CEN 7 FISH probe is labeled with Green dye (Ex 490 nm/

Em 515 nm)

CEN 17 FISH probe is labeled with Aqua dye (Ex 439 nm/

Em 482 nm)

CDKN2A FISH probe is labeled with Gold dye (Ex 532 nm/

Em 555 nm)

### Quantity

Each vial of DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe Assay contains 100µl sufficient for 20 tests (ENZ-GEN440-0020) or 500µl sufficient for 100 tests (ENZ-GEN440-0100). Apply 5 µl of probe to the sample area of a 6 mm well.

Each vial of SEEBRIGHT® Mounting Medium with DAPI contains 200µl sufficient for 20 tests (ENZ-GEN420-0020) or 1ml sufficient for 100 tests (ENZ-GEN420-0100). Apply mounting medium to the sample area as desired.

**Technical Info / Product Notes** 

The DEEPSEE® CDKN2A/CEN3/7/17 Quad Probe Assay is designed as a quadruple color assay to detect aneuploidies of chromosomes 3, 7, and 17 along with aberrations in the 9p21.3 locus in a single assay. Two red, two green, two aqua and two gold signals will identify the normal chromosomes CEN 3, CEN 7, CEN 17, and 9p21.3, respectively.

Last modified: May 29, 2024

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