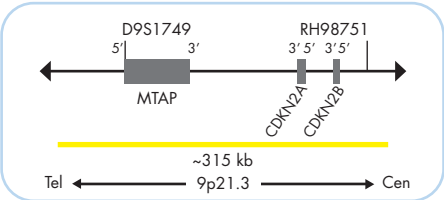
ZytoLight® SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe

CE 0124 IVD

Background

The ZytoLight® SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe (PL40) is intended to be used for the qualitative detection of the human CDKN2A gene as well as alpha-satellites of chromosomes 3, 7, and 17 in formalin-fixed, paraffin-embedded specimens by fluorescence *in situ* hybridization (FISH). The probe is intended to be used in combination with the ZytoLight® FISH-Tissue Implementation Kit (Prod. No. Z-2028-5/-20).
The product is intended for professional use only. All tests using the product should be performed in a certified, licensed anatomic pathology laboratory under the supervision of a pathologist/human geneticist by qualified personnel.
The probe is intended to be used as an aid to the differential diagnosis of various cancers and therapeutic measures should not be initiated based on the test result alone.

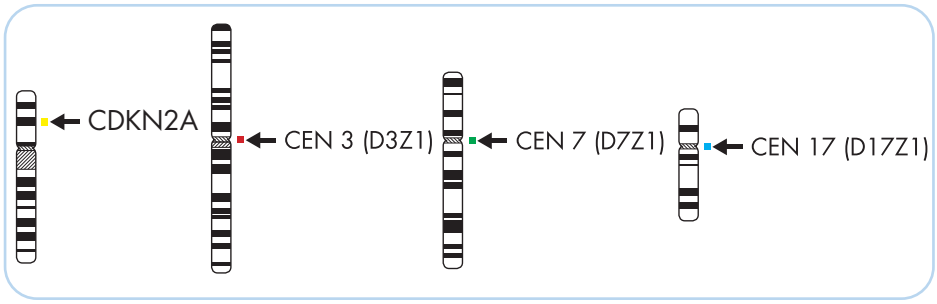


SPEC CDKN2A Probe map (not to scale).

Probe Description

The ZytoLight® SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe is composed of:

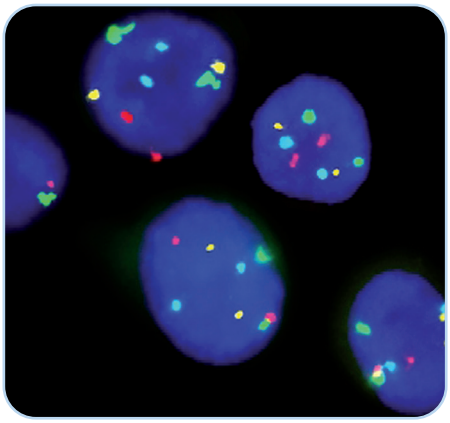
- ZyGold (excitation 532 nm and emission 553 nm) labeled polynucleotides (~5.5 ng/µl), which target sequences mapping in 9p21.3** (chr9:21,742,629-22,056,853) harboring the CDKN2A gene region.
- ZyRed (excitation 580 nm/emission 599 nm) labeled polynucleotides (~0.5 ng/µl), which target sequences mapping in 3p11.1-q11.1 specific for the alpha satellite centromeric region D3Z1 of chromosome 3.
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 7p11.1-q11.1 specific for the alpha satellite centromeric region D7Z1 of chromosome 7.
- ZyBlue (excitation 418 nm/emission 467 nm) labeled polynucleotides (~12 ng/µl), which target sequences mapping in 17p11.1-q11.1 specific for the alpha satellite centromeric region D17Z1 of chromosome 17.
- Formamide based hybridization buffer



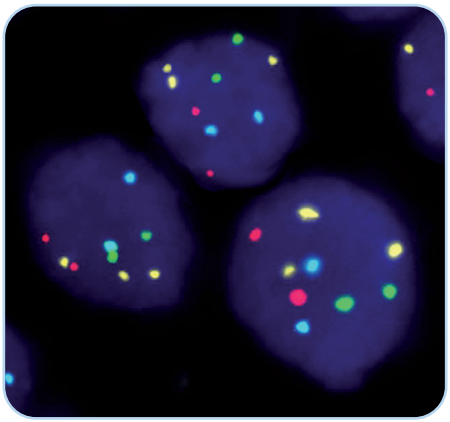
Ideograms of chromosomes 9, 3, 7, and 17 indicating the hybridization locations.

Results

In a normal interphase nucleus, two gold, two red, two green, and two blue signals are expected. In a cell with deletion of the CDKN2A gene locus, a reduced number of gold signals will be observed. In cells with aneusomy of chromosomes 3, 7, or 17 more or less signals of the respective color will be visible.



Normal cytological specimen hybridized with SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe as indicated by two gold (CDKN2A), two red (CEN 3), two green (CEN 7), and two blue (CEN 17) signals.



Example of an aberrant signal pattern: SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe hybridized to tumor cells showing a trisomy 9 as indicated by three CDKN2A signals (gold) in each nucleus.

Prod. No.	Product	Label	Tests* (Volume)
Z-2081-50	ZytoLight SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe CE0124 IVD	/●/●/●	5 (50 µl)
Z-2081-200	ZytoLight SPEC CDKN2A/CEN 3/7/17 Quadruple Color Probe CE0124 IVD	/●/●/●	20 (200 µl)
Related Products			
Z-2028-5	ZytoLight FISH-Tissue Implementation Kit CE IVD Incl. Heat Pretreatment Solution Citric, 150 ml; Pepsin Solution, 1 ml; Wash Buffer SSC, 210 ml; 25x Wash Buffer A, 50 ml; DAPI/DuraTect-Solution, 0.2 ml		5
Z-2028-20	ZytoLight FISH-Tissue Implementation Kit CE IVD Incl. Heat Pretreatment Solution Citric, 500 ml; Pepsin Solution, 4 ml; Wash Buffer SSC, 560 ml; 25x Wash Buffer A, 100 ml; DAPI/DuraTect-Solution, 0.8 ml		20

** Using 10 µl probe solution per test. IVD labeled products are only available in certain countries. All other countries research use only! Please contact your local dealer for more information.*

***According to Human Genome Assembly GRCh37/hg19*