## Zyto Light ® SPEC CDKN2A/CEN 9 Dual Color Probe



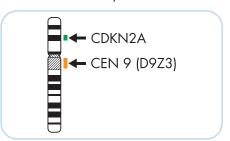
## **Background**

The ZytoLight ® SPEC CDKN2A/CEN 9 Dual Color Probe (PL22) is intended to be used for the qualitative detection of deletions involving the human CDKN2A gene as well as the detection of the classical satellite III region of chromosome 9 in cytologic or formalin-fixed, paraffin-embedded specimens by fluorescence in situ hybridization (FISH). The probe is intended to be used in combination with ZytoLight ® FISH Implementation Kits (Prod. No. Z-2028-5/-20, or Z-2099-20). 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.

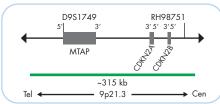
## **Probe Description**

The ZytoLight ® SPEC CDKN2A/CEN 9 Dual Color Probe is composed of:

- · ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/µl), which target sequences mapping in 9p21.3\*\* (chr9:21,742,629-22,056,853) harboring the CDKN2A gene region.
- · ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~1.5 ng/µl), which target sequences mapping in 9q12 specific for the classical satellite III region D9Z3 of chromosome 9.
- · Formamide based hybridization buffer



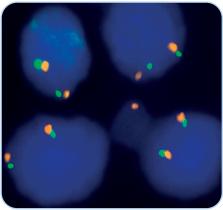
Ideogram of chromosome 9 indicating the hybridization locations.



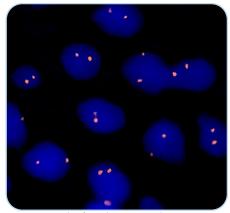
SPEC CDKN2A Probe map (not to scale).

## Results

In a normal interphase nucleus, two orange and two green signals are expected. In a cell with deletion of the CDKN2A gene locus, a reduced number of green signals will be observed. Deletions affecting only parts of the CDKN2A gene might result in a normal signal pattern with green signals of reduced size.



SPEC CDKN2A/CEN 9 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus.



Example of an aberrant signal pattern: Glioblastoma tissue section with homozygous deletion of the CDKN2A gene as indicated by the loss of both green signals in each nucleus.

Prod. No.	Product	Label	Tests* (Volume)
Z-2063-50	Zyto Light SPEC CDKN2A/CEN 9 Dual Color Probe C € 0124 IVD	•/•	5 (50 µl)
Z-2063-200	Zyto Light SPEC CDKN2A/CEN 9 Dual Color Probe C € 0124 IVD	•/•	20 (200 µl)
Related Products			
Z-2028-5	Zyto Light FISH-Tissue Implementation Kit C E 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	Zyto Light FISH-Tissue Implementation Kit C E 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
Z-2099-20	Zyto Light FISH-Cytology Implementation Kit C € IVD Incl. Cytology Pepsin Solution, 4 ml; 20x Wash Buffer TBS, 50 ml; 10x MgCl <sub>x</sub> , 50 ml; 10x PBS, 50 ml; Cytology Stringency Wash Buffer SSC, 500 ml; Cytology Wash Buffer SSC, 500 ml; DAPI/DuraTect-Solution, 0.8 ml		20

<sup>\*</sup> Using 10 µl probe solution per test. 🚾 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

