

ZytoLight® SPEC PTEN/CEN 10 Dual Color Probe



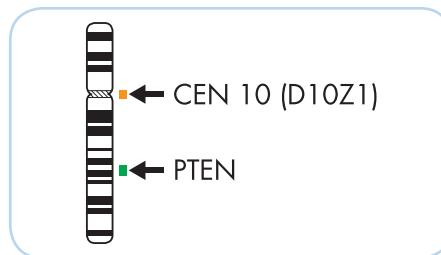
Background

The ZytoLight® SPEC PTEN/CEN 10 Dual Color Probe (PL37) is intended to be used for the qualitative detection of deletions involving the human PTEN gene as well as the detection of chromosome 10 alpha satellites 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.

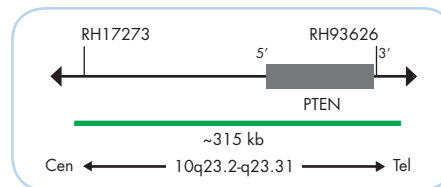
Probe Description

The ZytoLight® SPEC PTEN/CEN 10 Dual Color Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 10q23.2-q23.31** (chr10:89,440,649-89,755,790) harboring the PTEN gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~1.5 ng/μl), which target sequences mapping in 10p11.1-q11.1 specific for the alpha satellite centromeric region D10Z1 of chromosome 10.
- Formamide based hybridization buffer



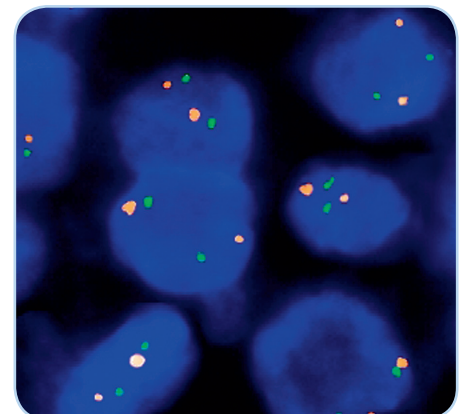
Ideogram of chromosome 10 indicating the hybridization locations.



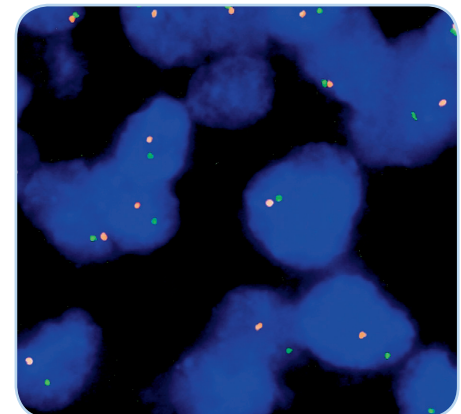
SPEC PTEN Probe map (not to scale).

Results

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



SPEC PTEN/CEN 10 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: Melanoma tissue section with chromosome 10 monosomy as indicated by one orange and one green signal in each nucleus.

Prod. No.	Product	Label	Tests* (Volume)
Z-2078-50	ZytoLight SPEC PTEN/CEN 10 Dual Color Probe CE IVD	●/●	5 (50 μl)
Z-2078-200	ZytoLight SPEC PTEN/CEN 10 Dual Color Probe CE 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