

ZytoLight® SPEC CD274,PDCD1LG2/CEN 9 Dual Color Probe



Background

The *ZytoLight*® SPEC CD274,PDCD1LG2/CEN 9 Dual Color Probe (PL138) is intended to be used for the qualitative detection of amplifications involving the human CD274,PDCD1LG2 gene cluster as well as the detection of the classical satellite III region of chromosome 9 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.

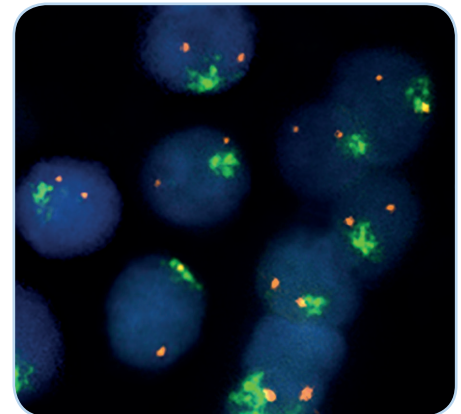
Probe Description

The *ZytoLight*® SPEC CD274,PDCD1LG2/CEN 9 Dual Color Probe is composed of:

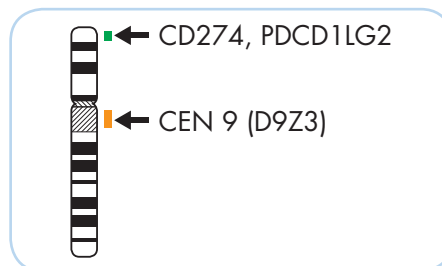
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 9p24.1** (chr9:5,253,553-5,819,972) harboring the CD274, PDCD1LG2 gene cluster.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~1.5 ng/μl), which target sequences mapping in 9q12 specific for the classical satellite III centromeric region D9Z3 of chromosome 9.
- Formamide based hybridization buffer

Results

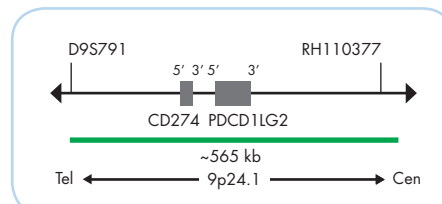
In a normal interphase nucleus, two orange and two green signals are expected. In a cell with amplification of the CD274,PDCD1LG2 gene cluster, multiple copies of the green signal or large green signal clusters will be observed.



Example of an aberrant signal pattern: Primary mediastinal large B-cell lymphoma tissue section with amplification of the CD274,PDCD1LG2 gene region as indicated by green signal clusters in each nucleus.



Ideogram of chromosome 9 indicating the hybridization locations.



SPEC CD274, PDCD1LG2 Probe map (not to scale).

Prod. No.	Product	Label	Tests* (Volume)
Z-2179-50	<i>ZytoLight</i> SPEC CD274,PDCD1LG2/CEN 9 Dual Color Probe	●/●	5 (50 μl)
Z-2179-200	<i>ZytoLight</i> SPEC CD274,PDCD1LG2/CEN 9 Dual Color Probe	●/●	20 (200 μl)
Related Products			
Z-2028-5	<i>ZytoLight</i> FISH-Tissue Implementation Kit 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	<i>ZytoLight</i> FISH-Tissue Implementation Kit 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. 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