

# ZytoLight® SPEC MYCN/2q11 Dual Color Probe



## Background

The ZytoLight® SPEC MYCN/2q11 Dual Color Probe (PL33) is intended to be used for the qualitative detection of amplifications involving the human MYCN gene as well as the detection of chromosome 2q11 specific sequences in formalin-fixed, paraffin-embedded specimens, such as neuroblastoma and medulloblastoma, 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 neuroblastoma and medulloblastoma and therapeutic measures should not be initiated based on the test result alone.

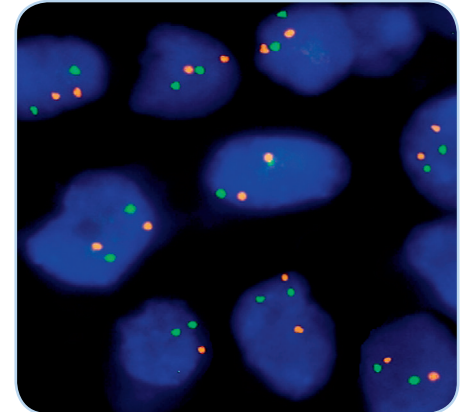
## Probe Description

The ZytoLight® SPEC MYCN/2q11 Dual Color Probe is composed of:

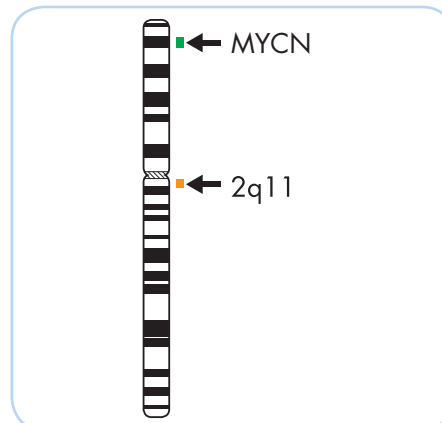
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 2p24.3\*\* (chr2:15,846,046-16,517,671) harboring the MYCN gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 2q11.2\*\* (chr2:100,132,806-100,621,725).
- Formamide based hybridization buffer

## Results

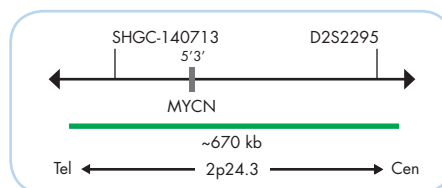
In a normal interphase nucleus, two orange and two green signals are expected. In a cell with amplification of the MYCN gene locus, multiple copies of the green signal or green signal clusters will be observed.



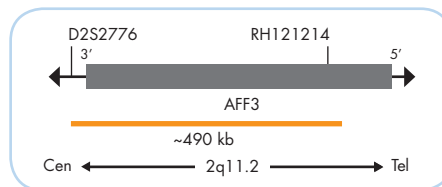
SPEC MYCN/2q11 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus.



Ideogram of chromosome 2 indicating the hybridization locations.



SPEC MYCN Probe map (not to scale).



SPEC 2q11 Probe map (not to scale).

Prod. No.	Product	Label	Tests* (Volume)
Z-2074-50	ZytoLight SPEC MYCN/2q11 Dual Color Probe		5 (50 μl)
Z-2074-200	ZytoLight SPEC MYCN/2q11 Dual Color Probe		20 (200 μl)
Related Products			
Z-2028-5	ZytoLight FISH-Tissue Implementation Kit		5
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			
Z-2028-20	ZytoLight FISH-Tissue Implementation Kit		20
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			

\* 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