

# ZytoLight® SPEC BCL2 Dual Color Break Apart Probe



## Background

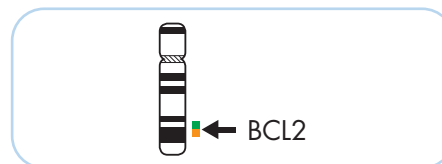
The *ZytoLight*® SPEC BCL2 Dual Color Break Apart Probe (PL150) is intended to be used for the qualitative detection of translocations involving the human BCL2 gene at 18q21.33 in formalin-fixed, paraffin-embedded specimens, such as B-cell lymphoma, by fluorescence *in situ* hybridization (FISH). The 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.

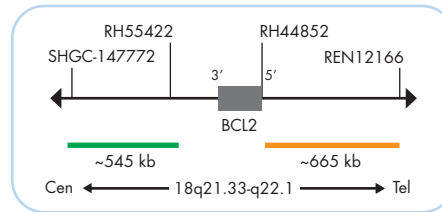
The probe is intended to be used as an aid to the differential diagnosis of B-cell lymphoma and therapeutic measures should not be initiated based on the test result alone.

## Probe Description

- The *ZytoLight*® SPEC BCL2 Dual Color Break Apart Probe is composed of:
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 18q21.33\*\* (chr18:60,046,152-60,589,273) proximal to the BCL2 breakpoint region.
  - ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 18q21.33-q22.1\*\* (chr18:60,994,528-61,658,503) distal to the BCL2 breakpoint region.
  - Formamide based hybridization buffer



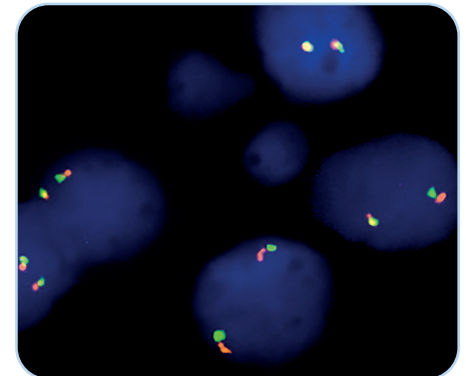
Ideogram of chromosome 18 indicating the hybridization locations.



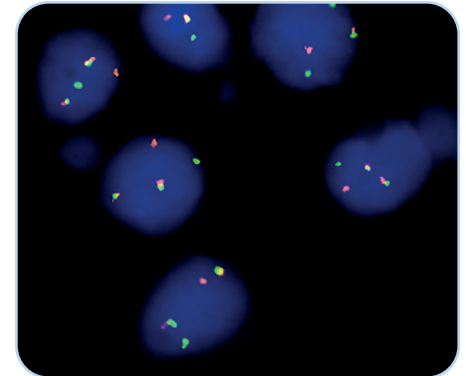
SPEC BCL2 Probe map (not to scale).

## Results

In an interphase nucleus lacking a translocation involving the 18q21.33-q22.1 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 18q21.33-q22.1 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 18q21.33-q22.1 locus and one 18q21.33-q22.1 locus affected by a translocation.



SPEC BCL2 Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Neck lymph node tissue section with translocation of the BCL2 gene as indicated by two non-rearranged orange/green fusion signals, one orange and one separate green signal.

Prod. No.	Product	Label	Tests* (Volume)
Z-2192-50	<i>ZytoLight</i> SPEC BCL2 Dual Color Break Apart Probe		5 (50 μl)
Z-2192-200	<i>ZytoLight</i> SPEC BCL2 Dual Color Break Apart Probe		20 (200 μl)
Related Products			
Z-2028-5	<i>ZytoLight</i> 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	<i>ZytoLight</i> 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