

# ZytoLight® SPEC TERT Dual Color Break Apart Probe



## Background

The ZytoLight® SPEC TERT Dual Color Break Apart Probe (PL229) is intended to be used for the qualitative detection of translocations involving the human TERT gene in 5p15.33 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.

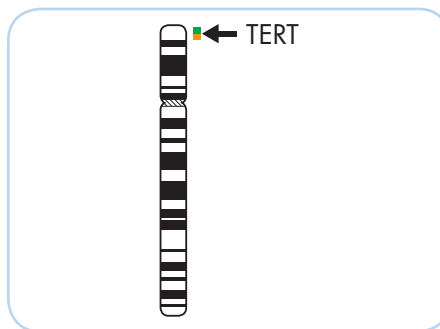
## Probe Description

The ZytoLight® SPEC TERT Dual Color Break Apart Probe is composed of:

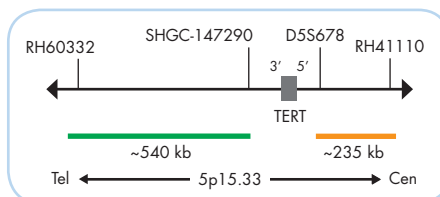
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/µl), which target sequences mapping in 5p15.33\*\* (chr5:620,184-1,161,456) distal to the TERT breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 5p15.33\*\* (chr5:1,353,007-1,588,209) proximal to the TERT breakpoint region.
- Formamide based hybridization buffer

## Results

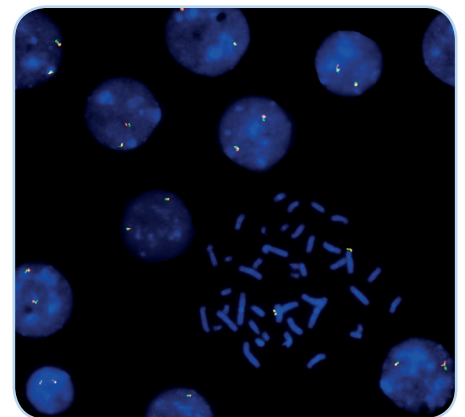
In an interphase nucleus lacking a translocation involving the 5p15.33 band, two orange/green fusion signals are expected, representing two normal (non-rearranged) 5p15.33 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 5p15.33 locus and one 5p15.33 locus affected by a TERT translocation.



Ideogram of chromosome 5 indicating the hybridization locations.



SPEC TERT Probe map (not to scale).



SPEC TERT Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals in each nucleus and to metaphase chromosomes of a normal cell.

Prod. No.	Product	Label	Tests* (Volume)
Z-2273-50	ZytoLight SPEC TERT Dual Color Break Apart Probe		5 (50 µl)
<b>Related Products</b>			
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			

\* 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