

# ZytoLight® SPEC TP63/TBL1XR1 TriCheck™ Probe



## Background

The ZytoLight® SPEC TP63/TBL1XR1 TriCheck™ Probe (PL274) is intended to be used for the qualitative detection of rearrangements involving the human TP63 gene at 3q28 and the human TBL1XR1 gene at 3q26.32 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). Interpretation of the results must be made within the context of the patient's clinical history with respect to further clinical and pathologic data of the patient by a qualified pathologist.

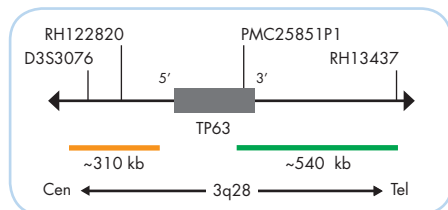
## Probe Description

The ZytoLight® SPEC TP63/TBL1XR1 TriCheck™ Probe is composed of:

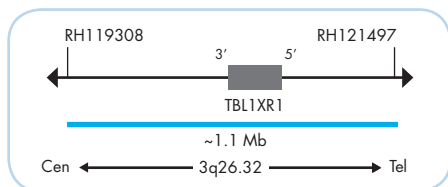
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/μl), which target sequences mapping in 3q28\*\* (chr3:189,559,557-190,097,196) distal to the TP63 breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 3q28\*\* (chr3:188,995,562-189,305,431) proximal to the TP63 breakpoint region.
- ZyBlue (excitation 418 nm/emission 467 nm) labeled polynucleotides (~37.0 ng/μl), which target sequences mapping in 3q26.32\*\* (chr3:176,217,831-177,284,492) harboring the TBL1XR1 gene region.
- Formamide based hybridization buffer

## Results

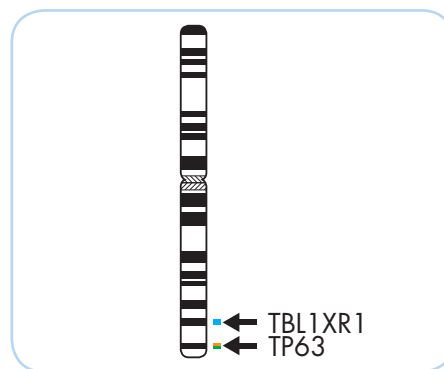
In an interphase nucleus without rearrangements of the TP63/TBL1XR1 loci, two green/orange fusion signals and two blue signals are expected. A TBL1XR1-TP63 inversion is indicated by one separate green signal, one separate orange signal, and an additional blue signal. The separate green and orange signal each co-localize with a blue signal. A TP63 translocation not affecting TBL1XR1 is indicated by separated orange and green signals without an additional blue signal.



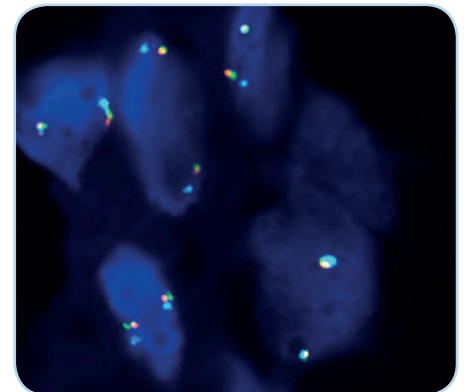
SPEC TP63 Probe map (not to scale).



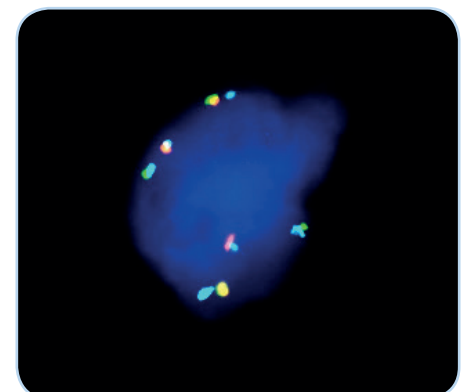
SPEC TBL1XR1 Probe map (not to scale).



Ideogram of chromosome 3 indicating the hybridization locations.



SPEC TP63/TBL1XR1 TriCheck™ Probe hybridized to normal interphase cells with non-rearranged TP63 loci (two orange/green fusion signals), and non-rearranged TBL1XR1 loci (two blue signals).



T-cell lymphoma cell line with a TBL1XR1-TP63 inversion as indicated by separate green signals, separate orange signals, each co-localizing with a blue signal.

Prod. No.	Product	Label	Tests* (Volume)
Z-2320-50	ZytoLight SPEC TP63/TBL1XR1 TriCheck™ Probe		5 (50 μl)
<b>Related Products</b>			
Z-2028-5	ZytoLight 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	ZytoLight 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