# ZytoLight® SPEC TERC/CEN 3 Dual Color Probe

RUO

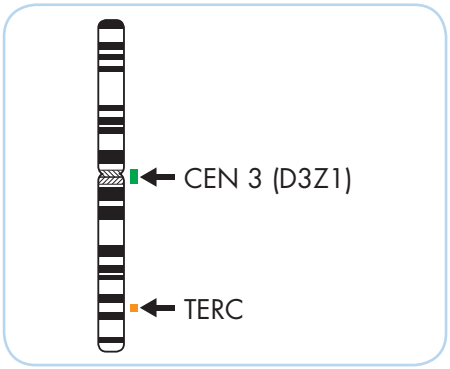
## Background

The ZytoLight® SPEC TERC/CEN 3 Dual Color Probe (PL239) is intended to be used for the qualitative detection of amplifications involving the TERC gene at 3q26.2 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).

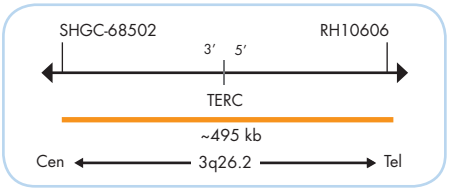
## Probe Description

The ZytoLight® SPEC TERC/CEN 3 Dual Color Probe is composed of:

- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 3q26.2** (chr3:169,246,595-169,743,447) harboring the TERC gene region.
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 3p11.1-q11.1 specific for the alpha satellite centromeric region D3Z1 of chromosome 3.
- Formamide based hybridization buffer



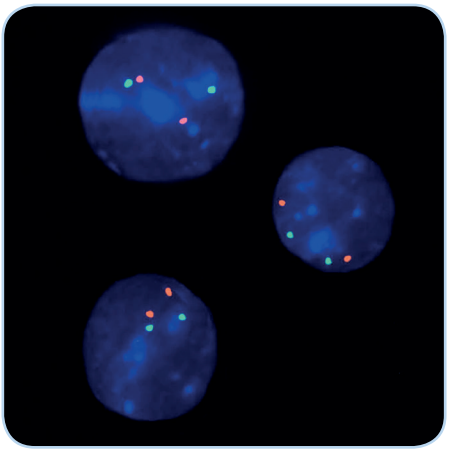

*Ideogram of chromosome 3 indicating the hybridization locations.*



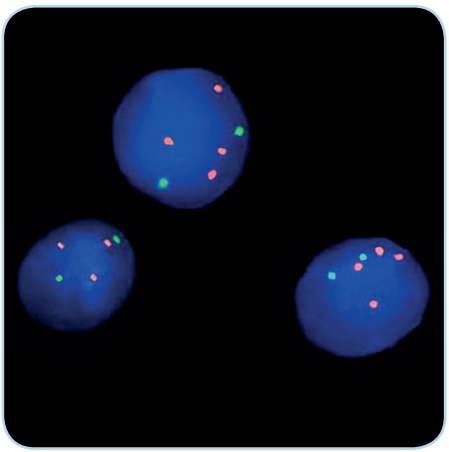

*SPEC TERC Probe map (not to scale).*

## Results

Using the SPEC TERC/CEN 3 Dual Color Probe in a normal interphase nucleus, two orange and two green signals are expected. In a cell with gain of the TERC gene locus, multiple copies of the orange signal or orange signal clusters will be observed.



*SPEC TERC/CEN 3 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals per nucleus.*



*Example of an aberrant signal pattern: SPEC TERC/CEN 3 Dual Color Probe hybridized to CaSki cells with TERC amplification as indicated by three or four orange signals in each nucleus.*

| Prod. No. | Product | Label | Tests* (Volume) |
|---|---|---|---|
| Z-2284-200 | ZytoLight SPEC TERC/CEN 3 Dual Color Probe RUO | ●/● | 20 (200 µl) |

** Using 10 µl probe solution per test. **According to Human Genome Assembly GRCh37/hg19*

RUO *For Research Use Only. Not for use in diagnostic procedures.*