ZytoLight® SPEC RICTOR/5q31.1 Dual Color Probe

RUO

Background

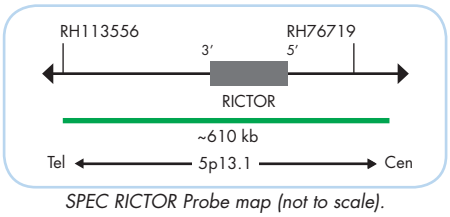
The ZytoLight® SPEC RICTOR/5q31.1 Dual Color Probe (PL234) is intended to be used for the qualitative detection of amplifications involving the RICTOR gene at 5p13.1 in formalin-fixed, paraffin-embedded specimens by fluorescence *in situ* hybridization (FISH). The probe is intended to be used in combination with the ZytoLight® FISH-Tissue Implementation Kit (Prod. No. Z-2028-5/-20).

Probe Description

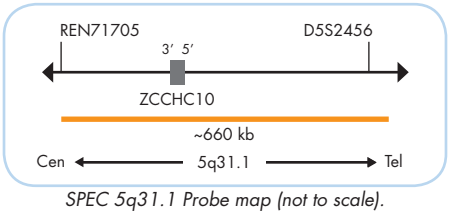
The ZytoLight® SPEC RICTOR/5q31.1 Dual Color Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/µl), which target sequences mapping in 5p13.1** (chr5:38,666,539-39,275,424) harboring the RICTOR gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 5q31.1** (chr5:132,126,018-132,785,764).
- Formamide based hybridization buffer

Ideogram of chromosome 5 indicating the hybridization locations.



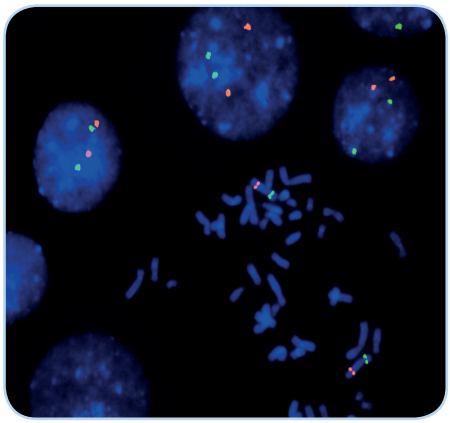
SPEC RICTOR Probe map (not to scale).



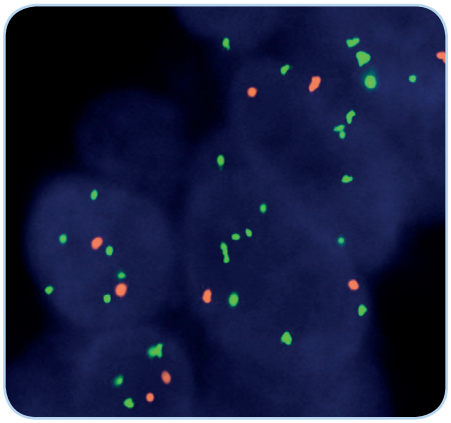
SPEC 5q31.1 Probe map (not to scale).

Results

Using the SPEC RICTOR/5q31.1 Dual Color Probe in a normal interphase nucleus, two orange and two green signals are expected. In a cell with gain of the RICTOR gene locus, multiple copies of the green signal or green signal clusters will be observed.



SPEC RICTOR/5q31.1 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus and to metaphase chromosomes of a normal cell.



Example of an aberrant signal pattern: Squamous cell carcinoma section with RICTOR amplification as indicated by multiple green signals in each nucleus.

Kindly provided by Prof. Dr. Schildhaus, Essen, Germany.

Prod. No.	Product	Label	Tests* (Volume)
Z-2278-200	ZytoLight SPEC RICTOR/5q31.1 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.*