ZytoLight® Glioma 1p/19q Probe Set

CE IVD

Background

The ZytoLight® Glioma 1p/19q Probe Set is intended to be used for the qualitative detection of deletions involving the human chromosomal region 1p36.31 as well as deletions involving the human chromosomal region 19q13.32-q13.33 in formalin-fixed, paraffin-embedded specimens, such as gliomas, 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 gliomas and therapeutic measures should not be initiated based on the test result alone.

Probe Description

The ZytoLight® Glioma 1p/19q Probe Set is a set comprising two separate probes and a quenching solution:

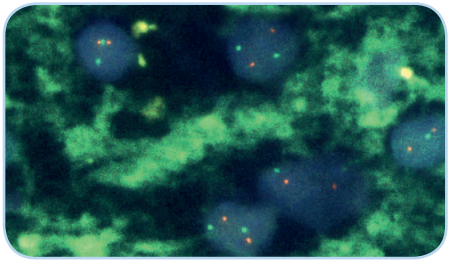
- ZytoLight® SPEC 1p36/1q25 Dual Color Probe (Prod. No. Z-2075-200)
- ZytoLight® SPEC 19q13/19p13 Dual Color Probe (Prod. No. Z-2076-200)
- ZyBlack Quenching Solution (Prod. No. BS-0002-8)
- The ZytoLight® SPEC 1p36/1q25 Dual Color Probe (PL34) is composed of:
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 1p36.31** (chr1:5,808,946-6,176,336).
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/µl), which target sequences mapping in 1q25.3** (chr1:184,271,714-184,986,522).
- Formamide based hybridization buffer

The ZytoLight® SPEC 19q13/19p13 Dual Color Probe (PL35) is composed of:

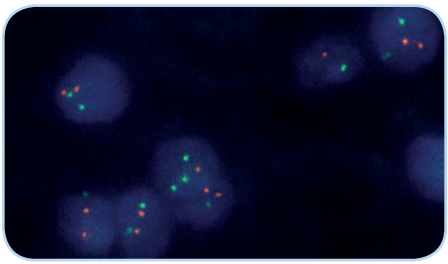
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 19q13.32-q13.33** (chr19:47,857,776-48,374,564)
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/µl), which target sequences mapping in 19p13.3** (chr19:658,555-1,144,465).
- Formamide based hybridization buffer

Results

Using the SPEC 1p36/1q25 Dual Color Probe or the SPEC 19q13/19p13 Dual Color Probe in a normal interphase nucleus, two orange and two green signals are expected. In a cell with deletions affecting the 1p36 or 19q13 locus, one or no copy of the orange signal will be observed.

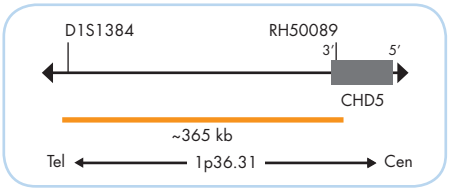


Brain tissue section hybridized with the ZytoLight® SPEC 1p36/1q25 Dual Color Probe without ZyBlack™ Quenching Solution.

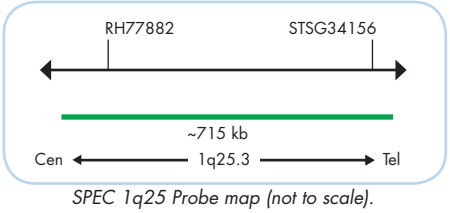


Brain tissue section hybridized with the ZytoLight® SPEC 1p36/1q25 Dual Color Probe with ZyBlack™ Quenching Solution.

ZytoLight® SPEC 1p36/1q25 Dual Color Probe

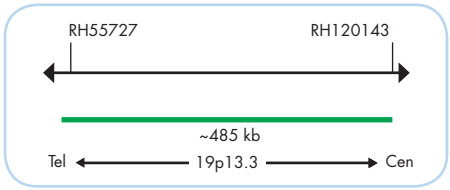


SPEC 1p36 Probe map (not to scale).

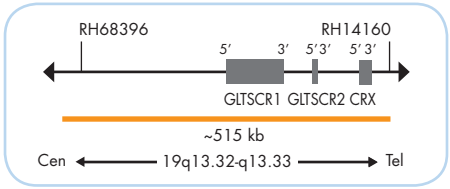


SPEC 1q25 Probe map (not to scale).

ZytoLight® SPEC 19q13/19p13 Dual Color Probe



SPEC 19p13 Probe map (not to scale).



SPEC 19q13 Probe map (not to scale).

Prod. No.	Product	Label	Tests* (Volume)
Z-2272-20	ZytoLight Glioma 1p/19q Probe Set CE IVD Incl. ZytoLight SPEC 1p36/1q25 Dual Color Probe, 0.2 ml; ZytoLight SPEC 19q13/19p13 Dual Color Probe, 0.2 ml; ZyBlack Quenching Solution, 8 ml		20
Related Products			
Z-2075-200	ZytoLight SPEC 1p36/1q25 Dual Color Probe CE IVD	●/●	20 (200 µl)
Z-2076-200	ZytoLight SPEC 19q13/19p13 Dual Color Probe CE IVD	●/●	20 (200 µl)
Z-2028-20	ZytoLight FISH-Tissue Implementation Kit CE IVD 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. IVD 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*