

ZytoLight® SPEC EWSR1 Dual Color Break Apart Probe



Background

The ZytoLight® SPEC EWSR1 Dual Color Break Apart Probe (PL55) is intended to be used for the qualitative detection of translocations involving the human EWSR1 gene at 22q12.2 in formalin-fixed, paraffin-embedded specimens, such as Ewing sarcoma, 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 Ewing sarcoma and therapeutic measures should not be initiated based on the test result alone.

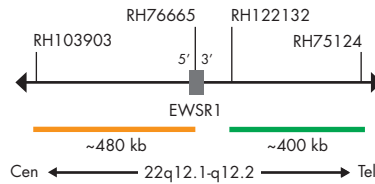
Probe Description

The ZytoLight® SPEC EWSR1 Dual Color Break Apart Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 22q12.2** (chr22:29,779,841-30,179,900) distal to the EWSR1 breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 22q12.1-q12.2** (chr22:29,191,431-29,673,440) proximal to the EWSR1 breakpoint region.
- Formamide based hybridization buffer



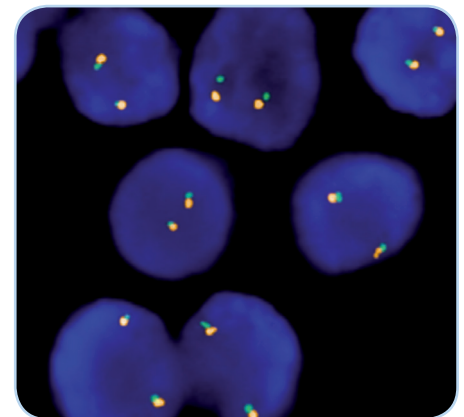
Ideogram of chromosome 22 indicating the hybridization locations.



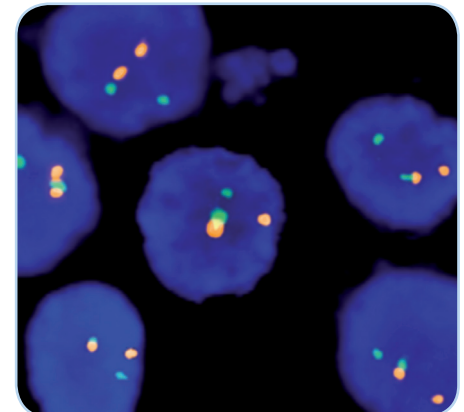
SPEC EWSR1 Probe map (not to scale).

Results

In an interphase nucleus lacking a translocation involving the 22q12.1-q12.2 band two orange/green fusion signals are expected representing two normal (non-rearranged) 22q12.1-q12.2 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 22q12.1-q12.2 locus and one 22q12.1-q12.2 locus affected by a 22q12.1-q12.2 translocation.



SPEC EWSR1 Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Ewing sarcoma tissue section with translocation affecting the 22q12.1-q12.2 locus as indicated by one non-rearranged orange/green fusion signal, one orange signal, and one separate green signal.

| Prod. No. | Product | Label | Tests* (Volume) |
|------------------|---|-------|-----------------|
| Z-2096-50 | ZytoLight SPEC EWSR1 Dual Color Break Apart Probe CE IVD | ●/● | 5 (50 μl) |
| Z-2096-200 | ZytoLight SPEC EWSR1 Dual Color Break Apart Probe CE IVD | ●/● | 20 (200 μl) |
| Related Products | | | |
| Z-2028-5 | ZytoLight FISH-Tissue Implementation Kit CE IVD 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 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