

ZytoLight® SPEC EGFR/CEN 7 Dual Color Probe



Background

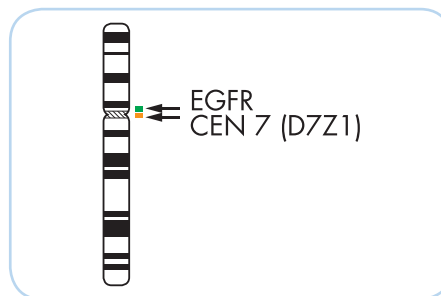
The ZytoLight® SPEC EGFR/CEN 7 Dual Color Probe (PL15) is intended to be used for the qualitative detection of amplifications involving the human EGFR gene as well as the detection of chromosome 7 alpha satellites in formalin-fixed, paraffin-embedded specimens, such as non-small cell lung cancer (NSCLC) and glioma, 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 NSCLC and glioma and therapeutic measures should not be initiated based on the test result alone.

Probe Description

The ZytoLight® SPEC EGFR/CEN 7 Dual Color Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 7p11.2** (chr7:54,912,555-55,548,375) harboring the EGFR gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~1.5 ng/μl), which target sequences mapping in 7p11.1-q11.1 specific for the alpha satellite centromeric region D7Z1 of chromosome 7.
- Formamide based hybridization buffer



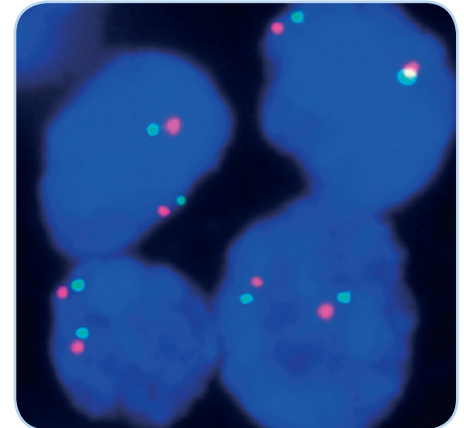
Ideogram of chromosome 7 indicating the hybridization locations.



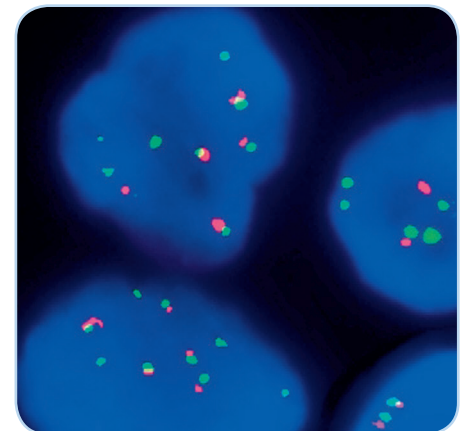
SPEC EGFR Probe map (not to scale).

Results

In a normal interphase nucleus, two orange and two green signals are expected. In a cell with amplification of the EGFR gene locus, multiple copies of the green signal or green signal clusters will be observed.



SPEC EGFR/CEN 7 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus.



Cancer cells with multiple copies of chromosome 7 and extra EGFR signals (green) in a sample from an NSCLC patient.

Prod. No.	Product	Label	Tests* (Volume)
Z-2033-50	ZytoLight SPEC EGFR/CEN 7 Dual Color Probe CE IVD	●/●	5 (50 μl)
Z-2033-200	ZytoLight SPEC EGFR/CEN 7 Dual Color 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