

# ZytoLight® SPEC FGFR1 /CEN 8 Dual Color Probe



## Background

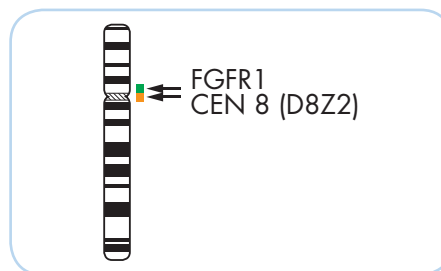
The ZytoLight® SPEC FGFR1/CEN 8 Dual Color Probe (PL29) is intended to be used for the qualitative detection of amplifications involving the human FGFR1 gene as well as the detection of chromosome 8 alpha satellites in formalin-fixed, paraffin-embedded specimens, such as breast cancer and squamous cell lung cancer, 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 breast cancer and squamous cell lung cancer and therapeutic measures should not be initiated based on the test result alone.

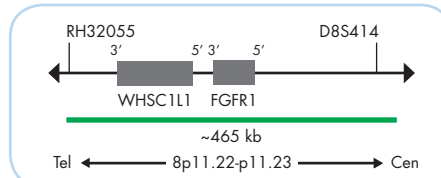
## Probe Description

The ZytoLight® SPEC FGFR1/CEN 8 Dual Color Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 8p11.22-p11.23\*\* (chr8:38,063,906-38,527,745) harboring the FGFR1 gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~1.5 ng/μl), which target sequences mapping in 8p11.1-q11.1 specific for the alpha satellite centromeric region D8Z2 of chromosome 8.
- Formamide based hybridization buffer



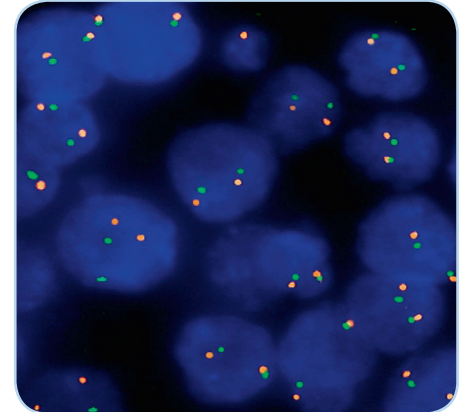
Ideogram of chromosome 8 indicating the hybridization locations.



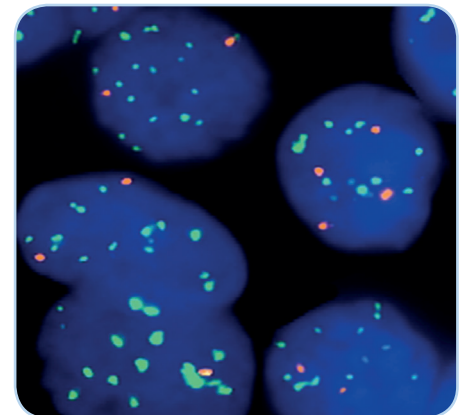
SPEC FGFR1 Probe map (not to scale).

## Results

In a normal interphase nucleus, two orange and two green signals are expected. In a cell with amplification of the FGFR1 gene locus, multiple copies of the green signal or green signal clusters will be observed.



SPEC FGFR1/CEN 8 Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus.



Lung carcinoma tissue section with interphase cells showing amplification of the FGFR1 gene (green) and partly polysomy 8 (orange).

Prod. No.	Product	Label	Tests* (Volume)
Z-2072-50	ZytoLight SPEC FGFR1/CEN 8 Dual Color Probe CE IVD	●/●	5 (50 μl)
Z-2072-200	ZytoLight SPEC FGFR1/CEN 8 Dual Color Probe CE IVD	●/●	20 (200 μl)
<b>Related Products</b>			
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