

ZytoLight® SPEC ERBB4/2q11 Dual Color Probe

RUO

Background

The ZytoLight® SPEC ERBB4/2q11 Dual Color Probe (PL32) is intended to be used for the qualitative detection of human ERBB4 gene amplifications as well as the detection of chromosome 2q11 specific sequences 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).

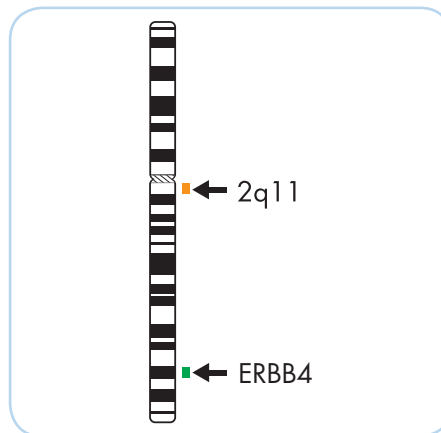
Probe Description

The ZytoLight® SPEC ERBB4/2q11 Dual Color Probe is composed of:

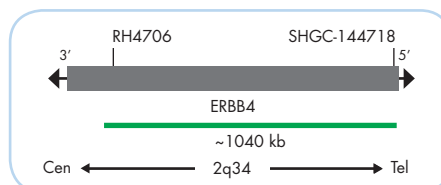
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 2q34** (chr2:212,356,657-213,394,224) harboring the ERBB4 gene region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 2q11.2** (chr2:100,132,806-100,621,725) harboring the AFF3 gene region.
- Formamide based hybridization buffer

Results

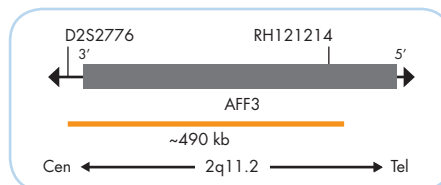
Using the SPEC ERBB4/2q11 Dual Color Probe in a normal interphase nucleus, two green and two orange signals are expected. In a cell with amplification of the ERBB4 gene locus, multiple copies of the green signal or green signal clusters will be observed.



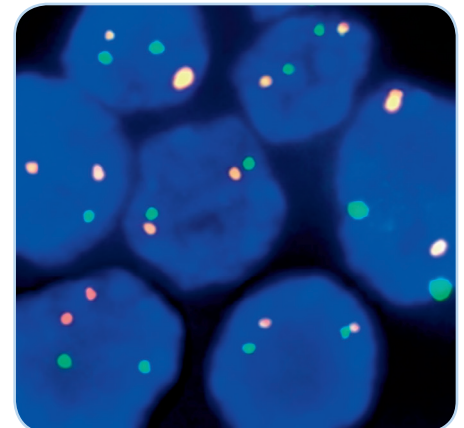
Ideogram of chromosome 2 indicating the hybridization locations.



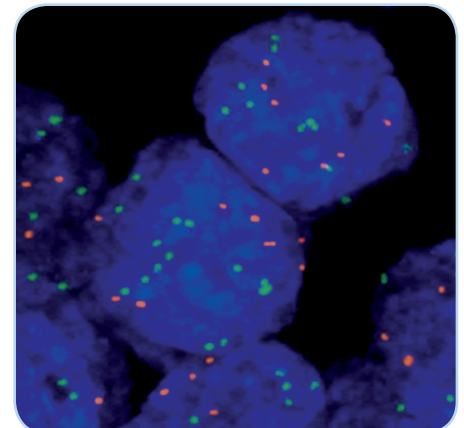
SPEC ERBB4 Probe map (not to scale).



SPEC 2q11 Probe map (not to scale).



SPEC ERBB4/2q11 Dual Color Probe hybridized to normal interphase cells as indicated by two green and two orange signals in each nucleus.



Example of an aberrant signal pattern: Breast cancer tissue section with amplification of the ERBB4 gene (green), SPEC 2q11 (orange).

Image kindly provided by Prof. Brockhoff, Regensburg, Germany.

Prod. No.	Product
Z-2057-200	ZytoLight SPEC ERBB4/2q11 Dual Color Probe RUO

Label	Tests* (Volume)
●/●	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.