

# ZytoLight® SPEC CARS Dual Color Break Apart Probe

**RUO**

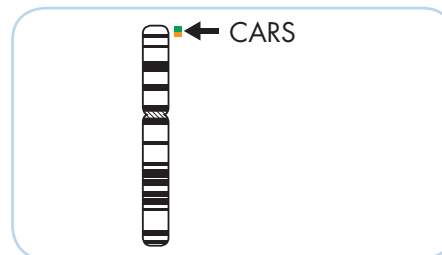
## Background

The ZytoLight® SPEC CARS Dual Color Break Apart Probe (PL94) is intended to be used for the qualitative detection of translocations involving the human CARS gene at 11p15.4 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).

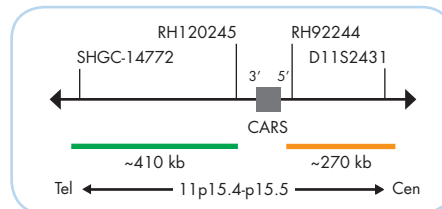
## Probe Description

The ZytoLight® SPEC CARS 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 11p15.4-p15.5\*\* (chr11:2,565,981-2,975,775) distal to the CARS breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 11p15.4\*\* (chr11:3,092,154-3,363,120) proximal to the CARS breakpoint region.
- Formamide based hybridization buffer



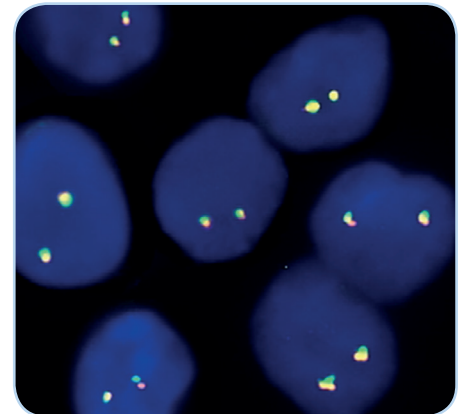
Ideogram of chromosome 11 indicating the hybridization locations.



SPEC CARS Probe map (not to scale).

## Results

In an interphase nucleus lacking a translocation involving the 11p15.4-p15.5 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 11p15.4-p15.5 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 11p15.4-p15.5 locus and one 11p15.4-p15.5 locus affected by a translocation.



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

Prod. No.	Product
Z-2137-50	ZytoLight SPEC CARS Dual Color Break Apart Probe <b>RUO</b>

Label	Tests* (Volume)
●/●	5 (50 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.