

ZytoLight® SPEC KIF5B Dual Color Break Apart Probe

RUO

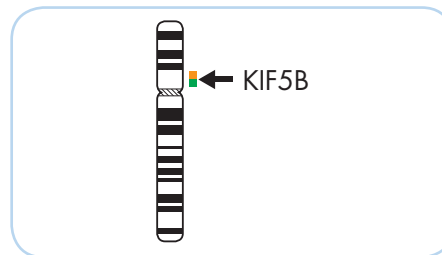
Background

The ZytoLight® SPEC KIF5B Dual Color Break Apart Probe (PL88) is intended to be used for the qualitative detection of translocations involving the human KIF5B gene at 10p11.22 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).

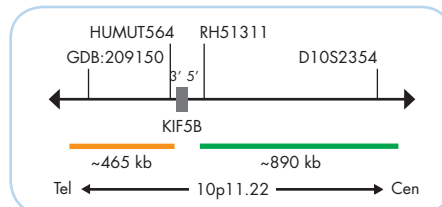
Probe Description

The ZytoLight® SPEC KIF5B 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 10p11.22** (chr10:32,400,431-33,289,946) proximal to the KIF5B breakpoint region.
- ZyOrange (excitation 547 nm/emission at 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 10p11.22** (chr10:31,820,824-32,288,200) distal to the KIF5B breakpoint region.
- Formamide based hybridization buffer



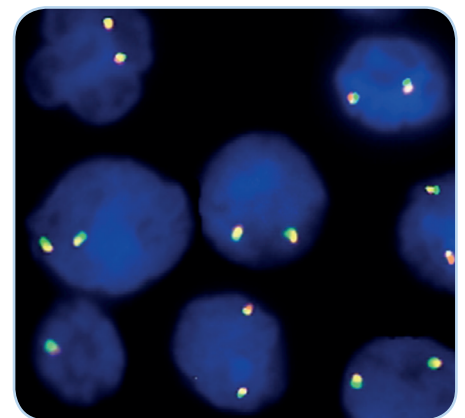
Ideogram of chromosome 10 indicating the hybridization locations.



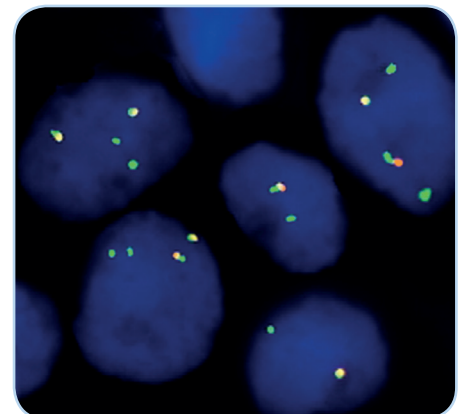
SPEC KIF5B Probe map (not to scale).

Results

In an interphase nucleus lacking a translocation involving the 10p11.22 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 10p11.22 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 10p11.22 locus and one 10p11.22 locus affected by a translocation.



SPEC KIF5B Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Example of an aberrant signal pattern: NSCLC tissue section with tetrasomy of chromosome 10 in some cells and an unbalanced translocation affecting KIF5B as indicated by one or two extra green signals.

Prod. No. Product

Z-2131-50 ZytoLight SPEC KIF5B Dual Color Break Apart Probe RUO

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.