ZytoLight® SPEC PDGFRB Dual Color Break Apart Probe

Intended Purpose

The ZytoLight SPEC PDGFRB Dual Color Break Apart Probe (PL155) is intended to be used for the qualitative detection of translocations involving the human PDGFRB gene at 5q32 in cytologic specimens by fluorescence *in situ* hybridization (FISH). The probe is intended to be used in combination with the ZytoLight FISH-Cytology Implementation Kit (Prod. No. Z-2099-20).

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 various cancers and therapeutic measures should not be initiated based on the test result alone.

Probe Description

The ZytoLight SPEC PDGFRB Dual Color Break Apart Probe is composed of:

- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10,0 ng/µl), which target sequences mapping in 5q32-q33.1* (chr5:149,548,518-150,285,722) distal to the PDGFRB breakpoint region (see Fig. 1).
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4,5 ng/µl), which target sequences mapping in 5q32* (chr5:149,058,515-149,471,369) proximal to the PDGFRB breakpoint region (see Fig. 1).
- Formamide based hybridization buffer

* according to Human Genome Assembly GRCh37/hg19

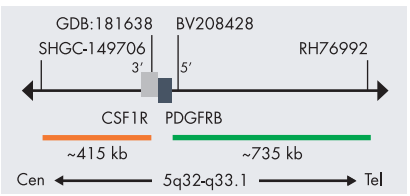
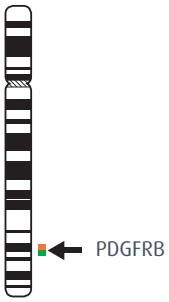
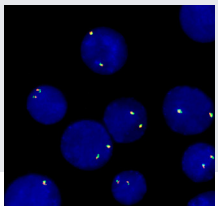


Fig. 1: SPEC PDGFRB Probe map (not to scale); Right: Ideogram of chromosome 5 indicating the hybridization locations



Results

Normal situation: In interphases of normal cells or cells without a translocation involving the PDGFRB gene region, two green/orange fusion signals appear.
Aberrant situation: One PDGFRB gene region affected by a translocation is indicated by one separate green signal and one separate orange signal.



Hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.

Labels	Chromosome	Reg. Status	Tests	Order No.
●|●	5	CE/IVD	5 (50 µl)	**Z-2197-50**

ZytoLight® SPEC IRF4,DUSP22 Dual Color Break Apart Probe

Intended Purpose

The ZytoLight SPEC IRF4,DUSP22 Dual Color Break Apart Probe (PL168) is intended to be used for the qualitative detection of translocations involving the human IRF4,DUSP22 gene region at 6p25.3 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).

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 various cancers and therapeutic measures should not be initiated based on the test result alone.

Probe Description

The ZytoLight SPEC IRF4,DUSP22 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 6p25.3* (chr6:557,233-940,968) proximal to the IRF4,DUSP22 breakpoint region (see Fig. 1).
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4,5 ng/µl), which target sequences mapping in 6p25.3* (chr6:114,722-273,908) distal to the IRF4,DUSP22 breakpoint region (see Fig. 1).
- Formamide based hybridization buffer

* according to Human Genome Assembly GRCh37/hg19

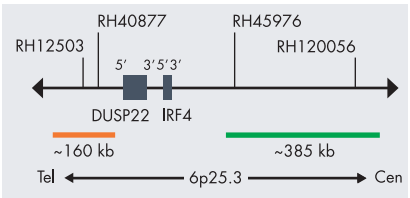
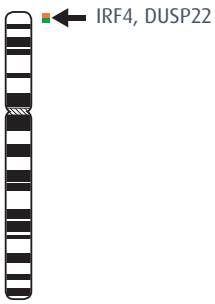
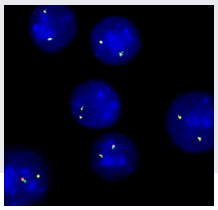


Fig. 1: SPEC IRF4,DUSP22 Probe map (not to scale); Right: Ideogram of chromosome 6 indicating the hybridization locations

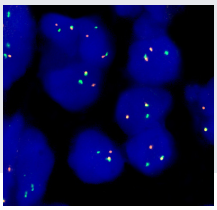


Results

Normal situation: In interphases of normal cells or cells without a translocation involving the IRF4,DUSP22 gene region, two green/orange fusion signals appear.
Aberrant situation: One IRF4,DUSP22 gene region affected by a translocation is indicated by one separate green signal and one separate orange signal.



Hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Example of an aberrant signal pattern: T-cell lymphoma tissue section with translocation affecting the 6p25.3 locus as indicated by one non-rearranged orange/green fusion signal, one orange signal, and one separate green signal.

Labels	Chromosome	Reg. Status	Tests	Order No.
●|●	6	CE/IVD	5 (50 µl)	**Z-2210-50**
			20 (200 µl)	**Z-2210-200**