

ZytoLight® SPEC USP6 Dual Color Break Apart Probe



Background

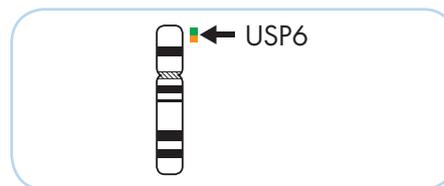
The ZytoLight® SPEC USP6 Dual Color Break Apart Probe (PL107) is intended to be used for the qualitative detection of translocations involving the human USP6 gene at 17p13.2 in formalin-fixed, paraffin-embedded specimens, such as aneurysmal bone cyst (ABC) or nodular fasciitis (NF), by fluorescence *in 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 ABC or NF and therapeutic measures should not be initiated based on the test result alone.

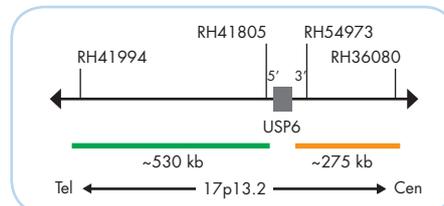
Probe Description

The ZytoLight® SPEC USP6 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 17p13.2** (chr17:4,489,889-5,017,582) distal to the USP6 breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 17p13.2** (chr17:5,087,046-5,361,104) proximal to the USP6 breakpoint region.
- Formamide based hybridization buffer



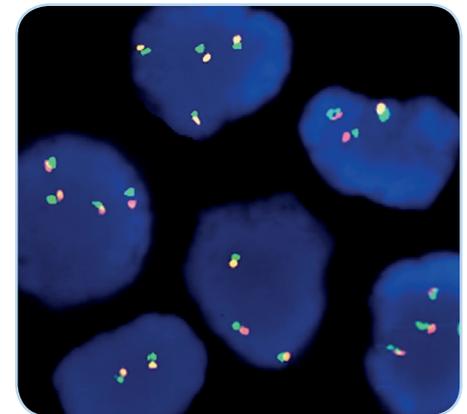
Ideogram of chromosome 17 indicating the hybridization locations.



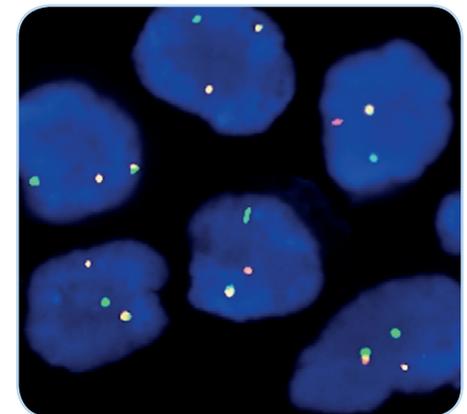
SPEC USP6 Probe map (not to scale).

Results

In an interphase nucleus lacking a translocation involving the 17p13.2 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 17p13.2 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 17p13.2 locus and one 17p13.2 locus affected by a translocation.



SPEC USP6 Break Apart Probe hybridized to aneurysmal bone cyst tissue section with polysomy of chromosome 17 but without translocation affecting the 17p13.2 locus as indicated by multiple orange/green fusion signals per nucleus.



Aneurysmal bone cyst tissue section with translocation affecting the 17p13.2 locus as indicated by one orange/green fusion (non-rearranged) signal, one orange signal, and one separate green signal.

Prod. No.	Product	Label	Tests* (Volume)
Z-2151-50	ZytoLight SPEC USP6 Dual Color Break Apart Probe CE IVD	●/●	5 (50 µl)
Z-2151-200	ZytoLight SPEC USP6 Dual Color Break Apart Probe CE IVD	●/●	20 (200 µl)
Related Products			
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