

ZytoLight® SPEC D13S319/13q34 Dual Color Probe



Background

The *ZytoLight*® SPEC D13S319/13q34 Dual Color Probe (PL235) is intended to be used for the qualitative detection of deletions involving the human D13S319 region and chromosome 13q34 specific sequences 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.

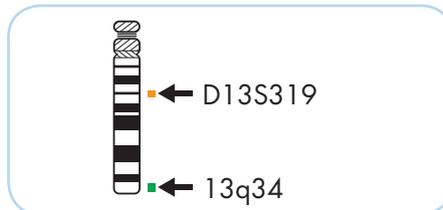
Probe Description

The *ZytoLight*® SPEC D13S319/13q34 Dual Color Probe is composed of:

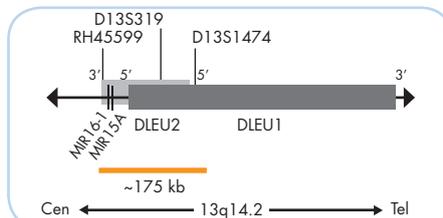
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 13q14.2** (chr13:50,607,438-50,781,256) harboring the D13S319 locus.
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/μl), which target sequences mapping in 13q34** (chr13:113,691,216-114,323,467).
- Formamide based hybridization buffer

Results

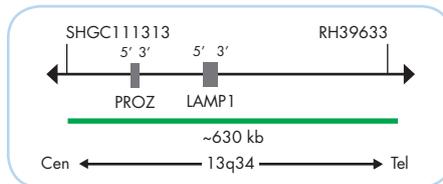
Using the SPEC D13S319/13q34 Dual Color Probe in a normal interphase nucleus, two orange and two green signals are expected. In a cell with deletions affecting the D13S319 locus, a reduced number of orange signals will be observed. Deletions affecting only parts of the D13S319 locus might result in a normal signal pattern with orange signals of reduced size. If deletions affect the D13S319 locus as well as the 13q34 locus, this might result in a reduced number of orange and green signals.



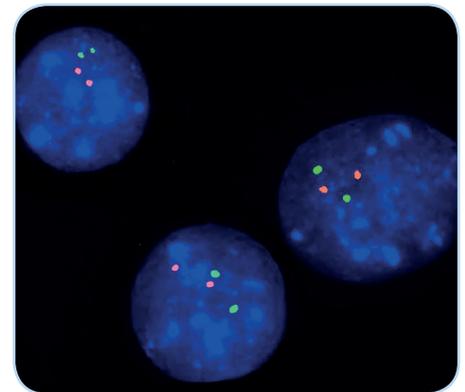
Ideogram of chromosome 13 indicating the hybridization locations.



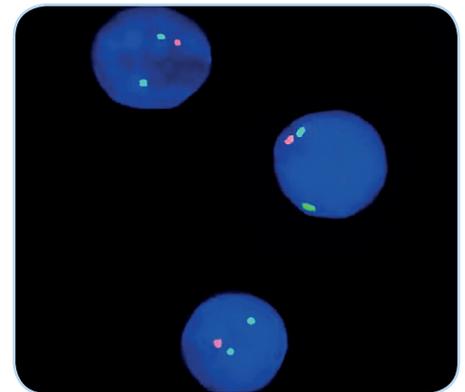
SPEC D13S319 Probe map (not to scale).



SPEC 13q34 Probe map (not to scale).



SPEC D13S319/13q34 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: Bone marrow smear with deletion of the D13S319 locus as indicated by one orange and two green signals in each nucleus.

Prod. No.	Product	Label	Tests* (Volume)
Z-2280-50	ZytoLight SPEC D13S319/13q34 Dual Color Probe	●/●	5 (50 μl)
Related Products			
Z-2099-20	ZytoLight FISH-Cytology Implementation Kit Incl. Cytology Pepsin Solution, 4 ml; 20x Wash Buffer TBS, 50 ml; 10x MgCl ₂ , 50 ml; 10x PBS, 50 ml; Cytology Stringency Wash Buffer SSC, 500 ml; Cytology Wash Buffer SSC, 500 ml; DAPI/DuraTect-Solution, 0.8 ml		20

* Using 10 μl probe solution per test. 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