

ZytoLight® SPEC Angelman Dual Color Probe



Background

The ZytoLight® SPEC Angelman Dual Color Probe (PL273) is intended to be used for the qualitative detection of human UBE3A gene deletions as well as the detection of the human PML gene 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).

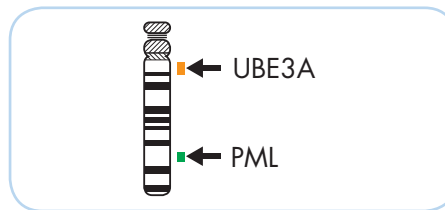
The product is intended for professional use only. All tests using the above mentioned product should be performed in a certified, licensed anatomic pathology laboratory under the supervision of a pathologist/human geneticist by qualified personnel.

Interpretation of the results must be made within the context of the patient's clinical history with respect to further clinical and pathologic data of the patient by a qualified pathologist/human geneticist.

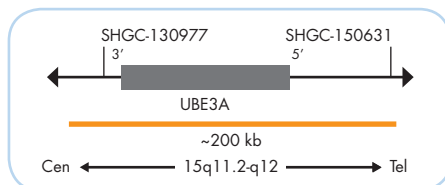
Probe Description

The ZytoLight® SPEC Angelmann Dual Color Probe is composed of:

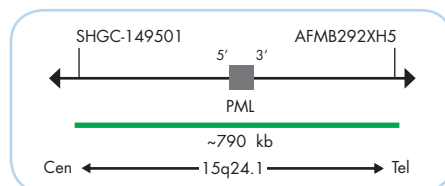
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 15q11.2-q12** (chr15:25,550,004-25,748,900) harboring the UBE3A gene region.
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/μl), which target sequences mapping in 15q24.1** (chr15:73,910,690-74,699,298) harboring the PML gene region.
- Formamide based hybridization buffer



Ideogram of chromosome 15 indicating the hybridization locations.



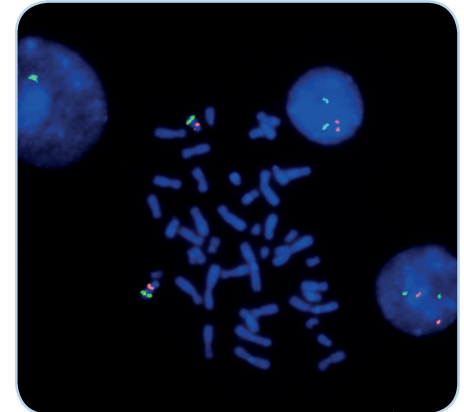
SPEC UBE3A Probe map (not to scale).



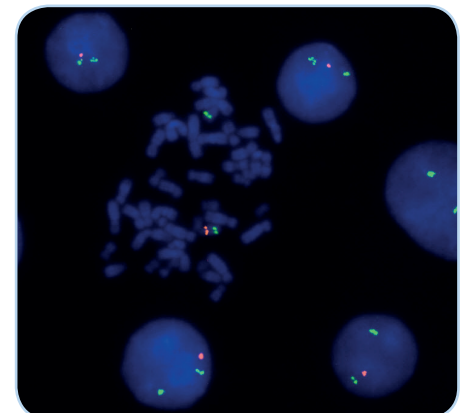
SPEC PML Probe map (not to scale).

Results

In a normal interphase nucleus, two orange and two green signals are expected. In a cell with deletion of the UBE3A gene locus, a reduced number of orange signals will be observed.



SPEC Angelman Dual Color Probe hybridized to normal interphase cells as indicated by two orange and two green signals in each nucleus and to metaphase chromosomes of a normal cell.



Lymphocytes and metaphase chromosomes from an Angelman syndrome case showing deletion affecting the chromosomal region 15q11.2-q12 as indicated by the loss of one orange signal.

Prod. No.	Product	Label	Tests* (Volume)
Z-2319-50	ZytoLight SPEC Angelman Dual Color Probe CE IVD	●/●	5 (50 μl)
Related Products			
Z-2099-20	ZytoLight FISH-Cytology Implementation Kit CE IVD 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. 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