

# ZytoLight® SPEC NUP98 Dual Color Break Apart Probe



## Background

The ZytoLight® SPEC NUP98 Dual Color Break Apart Probe (PL223) is intended to be used for the qualitative detection of translocations involving the human NUP98 gene at 11p15.4 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).

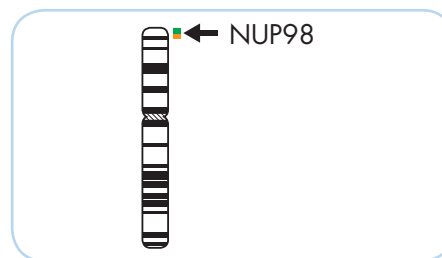
The product is intended for professional use only. All tests using the product should be performed in a certified, licensed anatomic pathology laboratory under the supervision of a pathologist/human geneticist by qualified personnel.

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.

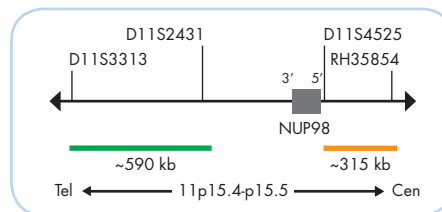
## Probe Description

The ZytoLight® SPEC NUP98 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 11p15.4-p15.5\*\* (chr11:2,773,748-3,363,120) distal to the NUP98 breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 11p15.4\*\* (chr11:3,829,054-4,142,792) proximal to the NUP98 breakpoint region.
- Formamide based hybridization buffer



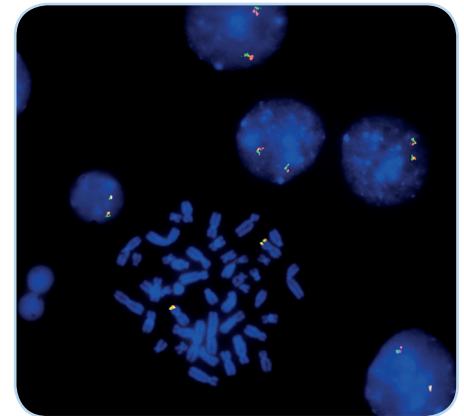
Ideogram of chromosome 11 indicating the hybridization locations.



SPEC NUP98 Probe map (not to scale).

## Results

In an interphase nucleus lacking a translocation involving the 11p15.4-p15.5 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 11p15.4-p15.5 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 11p15.4-p15.5 locus and one 11p15.4-p15.5 locus affected by a translocation or inversion.



SPEC NUP98 Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus and to metaphase chromosomes of a normal cell.

Prod. No.	Product	Label	Tests* (Volume)
Z-2266-50	ZytoLight SPEC NUP98 Dual Color Break Apart Probe CE IVD	●/●	5 (50 μl)
<b>Related Products</b>			
Z-2099-20	ZytoLight FISH-Cytology Implementation Kit CE IVD Incl. Cytology Pepsin Solution, 4 ml; 20x Wash Buffer TBS, 50 ml; 10x MgCl <sub>2</sub> , 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