## **Zyto Light ® SPEC DDIT3 Dual Color Break Apart Probe**



## **Background**

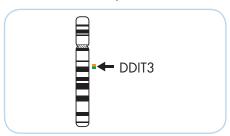
The ZytoLight® SPEC DDIT3 Dual Color Break Apart Probe (PL58) is intended to be used for the qualitative detection of translocations involving the human DDIT3 gene at 12q13.3 in formalin-fixed, paraffin-embedded specimens, such as myxoid liposarcomas (MLPS), by fluorescence in situ hybridization (FISH). 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 MLPS and therapeutic measures should not be initiated based on the test result alone.

## **Probe Description**

The ZytoLight ® SPEC DDIT3 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 12q13.3-14.1\*\* (chr12:58,024,366-58,775,832) distal to the DDIT3 breakpoint region.
- · ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 12q13.3\*\* (chr12:57,386,312-57,865,800) proximal to the DDIT3 breakpoint region.
- · Formamide based hybridization buffer



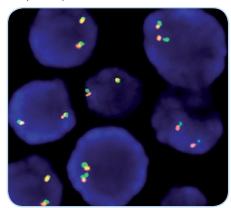
Ideogram of chromosome 12 indicating the hybridization locations.



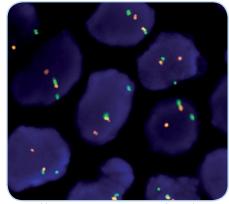
SPEC DDIT3 Probe map (not to scale).

## **Results**

In an interphase nucleus lacking a translocation involving the 12q13.3-q14.1 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 12q13.3-q14.1 loci. A signal pattern consisting of one orange/ green fusion signal, one orange signal, and a separate green signal indicates one normal 12q13.3-q14.1 locus and one 12q13.3-q14.1 locus affected by a 12a13.3-a14.1 translocation.



SPEC DDIT3 Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Myxoid liposarcoma tissue section with translocation affecting the 12q13.3-q14.1 locus as indicated by one non-rearranged orange/green fusion signal, one orange signal, and one separate green signal.

Prod. No.	Product	Label	Tests* (Volume)
Z-2100-50	Zyto <i>Light</i> SPEC DDIT3 Dual Color Break Apart Probe C € IVD	•/•	5 (50 µl)
Z-2100-200	Zyto <i>Light</i> SPEC DDIT3 Dual Color Break Apart Probe C € IVD	•/•	20 (200 µl)
Related Products			
Z-2028-5	Zyto Light FISH-Tissue Implementation Kit C $\in$ IVD Ind. 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	Zyto Light FISH-Tissue Implementation Kit C & 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

<sup>\*</sup> 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.

<sup>\*\*</sup>According to Human Genome Assembly GRCh37/hg19