## Zyto Light ® SPEC KMT2A Dual Color Break Apart Probe



## **Background**

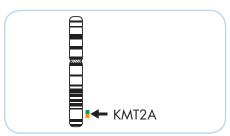
The ZytoLight ® SPEC KMT2A Dual Color Break Apart Probe (PL151) is intended to be used for the qualitative detection of translocations involving the human KMT2A gene at 11q23.3 in cytologic specimens by fluorescence in situ hybridization (FISH). The probe is intended to be used in combination with the 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.

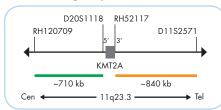
## **Probe Description**

The ZytoLight ® SPEC KMT2A 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 11q23.3\*\* (chr11:117,574,074-118,284,029) proximal to the KMT2A breakpoint region.
- · ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/µl), which target sequences mapping in 11q23.3\*\* (chr11:118,399,293-119,237,675) distal to the KMT2A breakpoint region.
- · Formamide based hybridization buffer



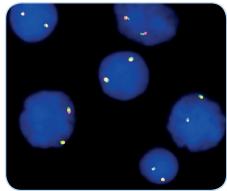
Ideogram of chromosome 11 indicating the hybridization locations.



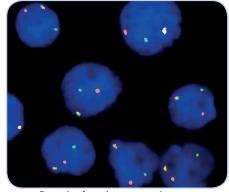
SPEC KMT2A Probe map (not to scale).

## Results

In an interphase nucleus lacking a translocation involving the 11q23.3 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 11q23.3 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 11q23.3 locus and one 11q23.3 locus affected by a translocation.



SPEC KMT2A Dual Color Break Apart Probe hybridized to normal interphase cells as indicated by two orange/green fusion signals per nucleus.



Example of an aberrant signal pattern:
Bone marrow smear with translocation of
the KMT2A gene 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-2193-50	Zyto <i>Light</i> SPEC KMT2A Dual Color Break Apart Probe C € IVD	•/•	5 (50 µl)
Z-2193-200	Zyto <i>Light</i> SPEC KMT2A Dual Color Break Apart Probe C € IVD	•/•	20 (200 µl)
Related Products			
Z-2099-20	Zyto <i>Light</i> FISH-Cytology Implementation Kit C € IVD		20
	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;		
	inci. Cytology Pepsin Solution, 4 mir, 20x Masin Butter 185, 30 mir, 10x MgCu <sub>2</sub> , 30 mir, 10x FB3, 30 mir, Cytology Stringency Masin Butter 35C, 300 mir, DAPI/DuraTect-Solution, 0.8 ml		

<sup>\*</sup> Using 10 µl probe solution per test. [VD] 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