

ZytoLight® SPEC BRAF Dual Color Break Apart Probe



Background

The ZytoLight® SPEC BRAF Dual Color Break Apart Probe (PL147) is intended to be used for the qualitative detection of translocations involving the human BRAF gene at 7q34 in formalin-fixed, paraffin-embedded specimens 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 various cancers and therapeutic measures should not be initiated based on the test result alone.

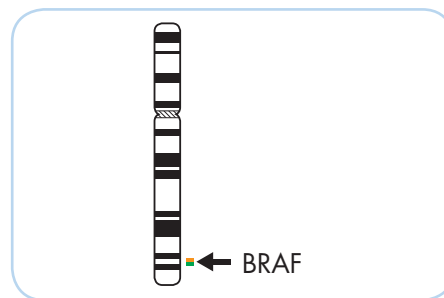
Probe Description

The ZytoLight® SPEC BRAF Dual Color Break Apart Probe is composed of:

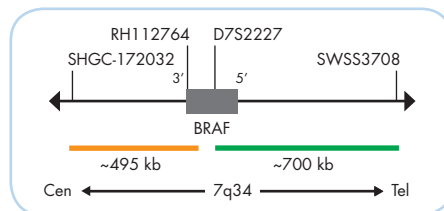
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10 ng/μl), which target sequences mapping in 7q34** (chr7:140,535,100-141,233,856) distal to the BRAF breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~4.5 ng/μl), which target sequences mapping in 7q34** (chr7:139,972,721-140,469,362) proximal to the BRAF breakpoint region.
- Formamide based hybridization buffer

Results

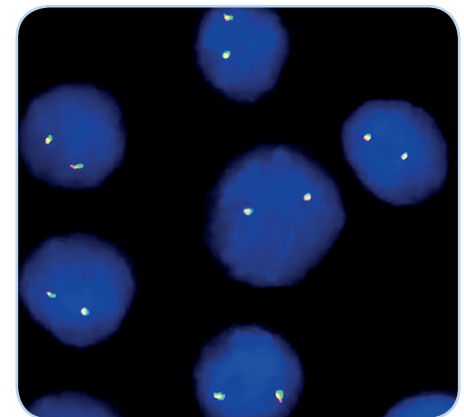
In an interphase nucleus lacking a rearrangement involving the 7q34 band, two orange/green fusion signals are expected representing two normal (non-rearranged) 7q34 loci. A signal pattern consisting of one orange/green fusion signal, one orange signal, and a separate green signal indicates one normal 7q34 locus and one 7q34 locus affected by a translocation or inversion. Isolated orange signals are the result of deletions distal to the BRAF breakpoint region.



Ideogram of chromosome 7 indicating the hybridization locations.



SPEC BRAF Probe map (not to scale).



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

Prod. No.	Product	Label	Tests* (Volume)
Z-2189-200	ZytoLight SPEC BRAF Dual Color Break Apart Probe		20 (200 μl)
Related Products			
Z-2028-20	ZytoLight FISH-Tissue Implementation Kit		20
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			

* 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