

ZytoDot® 2C Glioma 1p/19q Probe Set



Background

The ZytoDot® 2C Glioma 1p/19q Probe Set is intended to be used for the qualitative detection of deletions involving the human chromosomal region 1p36.31 as well as deletions involving the human chromosomal region 19q13.32-q13.33 in formalin-fixed, paraffin-embedded specimens, such as glioma, by chromogenic *in situ* hybridization (CISH). The probe is intended to be used in combination with the ZytoDot® 2C CISH Implementation Kit (Prod. No. C-3044-10/-40). 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 glioma and therapeutic measures should not be initiated based on the test result alone.

Probe Description

The ZytoDot® 2C Glioma 1p/19q Probe Set is a set comprising two separate probes:

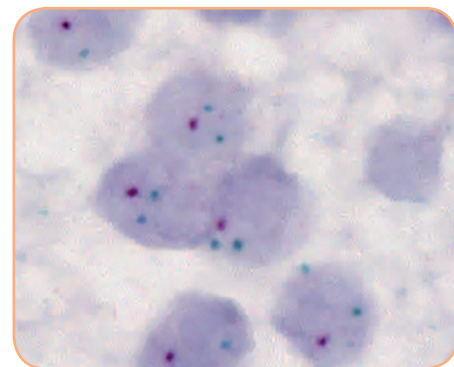
- ZytoDot® 2C SPEC 1p36/1q25 Probe (Prod. No. C-3036-100/-400)
- ZytoDot® 2C SPEC 19q13/19p13 Probe (Prod. No. C-3037-100/-400)
- The ZytoDot® 2C SPEC 1p36/1q25 Probe (PD21) is composed of:
 - Dinitrophenyl-labeled polynucleotides (~1.7 ng/μl), which target sequences mapping in 1p36.31** (chr1:5,808,946-6,176,336).
 - Digoxigenin-labeled polynucleotides (~1.7 ng/μl), which target sequences mapping in 1q25.3** (chr1:184,562,510-184,752,938).
- Formamide based hybridization buffer

The ZytoDot® 2C SPEC 19q13/19p13 Probe (PD22) is composed of:

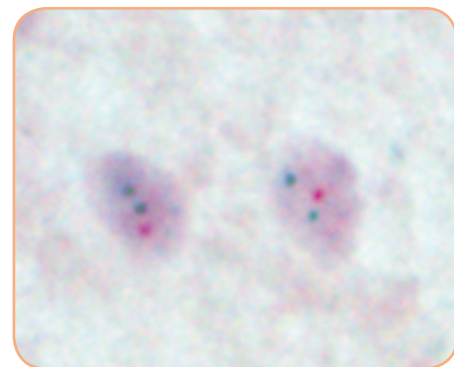
- Dinitrophenyl-labeled polynucleotides (~0.8 ng/μl), which target sequences mapping in 19q13.32-q13.33** (chr19:47,857,776-48,339,398).
- Digoxigenin-labeled polynucleotides (~0.8 ng/μl), which target sequences mapping in 19p13.3** (chr19:815,938-962,244).
- Formamide based hybridization buffer

Results

Using the SPEC 1p36/1q25 Probe or the SPEC 19q13/19p13 Probe in a normal interphase nucleus, two red and two green signals are expected. In a cell with deletions affecting the 1p36 or 19q13 locus, one or no copy of the red signal will be observed.



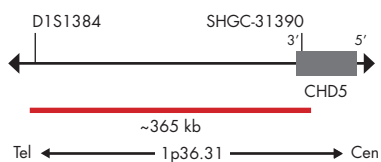
SPEC 1p36/1q25 Probe hybridized to glioma tissue section with 1p36 deletion as indicated by one red signal in each nucleus.



SPEC 19q13/19p13 Dual Color Probe hybridized to glioma tissue section with 19q13 deletion as indicated by one red signal in each nucleus.

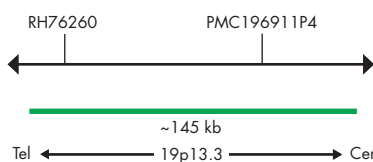
Images kindly provided by Prof. W. Müller, University Leipzig, Germany.

ZytoDot® 2C SPEC 1p36/1q25 Probe

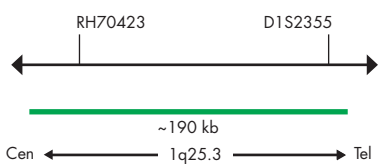


SPEC 1p36 Probe map (not to scale).

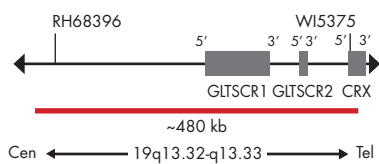
ZytoDot® 2C SPEC 19q13/19p13 Probe



SPEC 19p13 Probe map (not to scale).



SPEC 1q25 Probe map (not to scale).



SPEC 19q13 Probe map (not to scale).

Prod. No.	Product	Tests* (Volume)
C-3076-10	ZytoDot 2C Glioma 1p/19q Probe Set	10
	Incl. ZytoDot 2C SPEC 1p36/1q25 Probe, 0.1 ml; ZytoDot 2C SPEC 19q13/19p13 Probe, 0.1 ml	
C-3076-40	ZytoDot 2C Glioma 1p/19q Probe Set	40
	Incl. ZytoDot 2C SPEC 1p36/1q25 Probe, 0.4 ml; ZytoDot 2C SPEC 19q13/19p13 Probe, 0.4 ml	
Related Products		
C-3044-10	ZytoDot 2C CISH Implementation Kit	10
	Incl. Heat Pretreatment Solution EDTA, 150 ml; Pepsin Solution, 1 ml; Wash Buffer SSC, 210 ml; 20x Wash Buffer TBS, 50 ml; Anti-DIG/DNP-Mix, 1 ml; HRP/AP-Polymer-Mix, 1 ml; AP-Red Solution A, 0.1 ml; AP-Red Solution B, 4 ml; HRP-Green Solution A, 0.2 ml; HRP-Green Solution B, 4 ml; Nuclear Blue Solution, 4 ml; Mounting Solution (alcoholic), 1 ml	
C-3044-40	ZytoDot 2C CISH Implementation Kit	40
	Incl. Heat Pretreatment Solution EDTA, 500 ml; Pepsin Solution, 4 ml; Wash Buffer SSC, 560 ml; 20x Wash Buffer TBS, 2x 50 ml; Anti-DIG/DNP-Mix, 4 ml; HRP/AP-Polymer-Mix, 4 ml; AP-Red Solution A, 0.4 ml; AP-Red Solution B, 15 ml; HRP-Green Solution A, 0.8 ml; HRP-Green Solution B, 15 ml; Nuclear Blue Solution, 20 ml; Mounting Solution (alcoholic), 4 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