ZytoDot ® 2C SPEC 1p36/1q25 Probe
ZytoDot ® 2C SPEC 19q13/19p13 Probe

CE IVD

Background

The ZytoDot ® 2C SPEC 1p36/1q25 Probe and the ZytoDot ® 2C SPEC 19q13/19p13 Probe are designed for the detection of 1p and 19q deletions, respectively.

Deletions affecting the short arm of chromosome 1 (1p) are frequently found in human gliomas and neuroblastomas, but also in breast, lung, endometrial, ovarian, and colorectal carcinomas. Loss of 1p is a strong prognostic factor in patients with neuroblastoma. Since loss of 1p reliably identifies patients at high risk in stages I, II, and IVS, which are otherwise clinically favorable, more aggressive therapy may be considered in these patients. Deletions affecting the long arm of chromosome 19 (19q) are frequently found in human malignant gliomas as well as in neuroblastomas and epithelial ovarian cancers. Several studies showed correlation of combined allelic losses at 1p36 and 19q13 with oligodendroglioma histology and association with both chemotherapeutic response and survival in patients with anaplastic oligodendrogliomas. Hence, determination of 1p and 19q status may aid therapeutic decisions and predict outcome in patients with anaplastic oligodendrogliomas.

References
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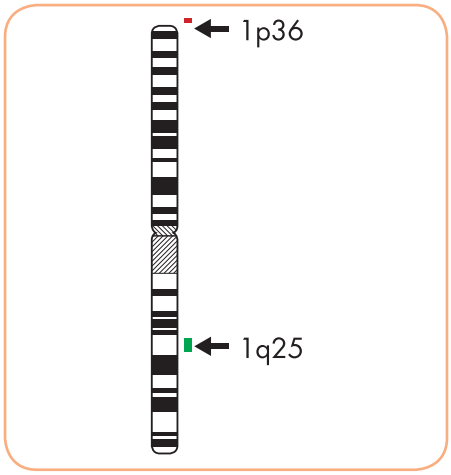
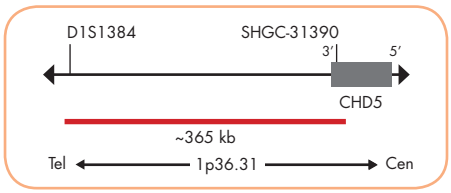
Probe Description

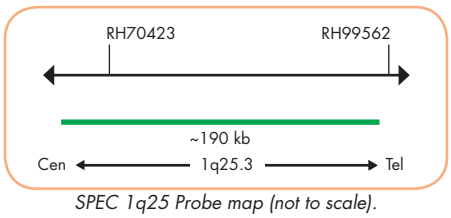
The ZytoDot ® 2C SPEC 1p36/1q25 Probe is a mixture of a Dinitrophenyl-labeled 1p36 probe specific for the smallest region of consistent deletion (SRD) of chromosome 1 defined in neuroblastoma at 1p36.31 and a Digoxigenin-labeled 1q25 probe specific for 1q25.3.



Ideogram of chromosome 1 indicating the hybridization locations.

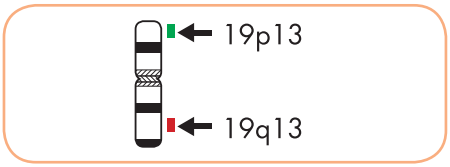


SPEC 1p36 Probe map (not to scale).

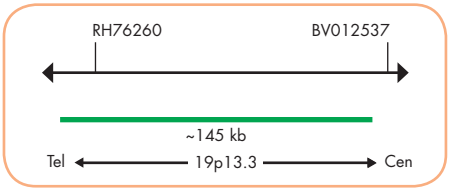


SPEC 1q25 Probe map (not to scale).

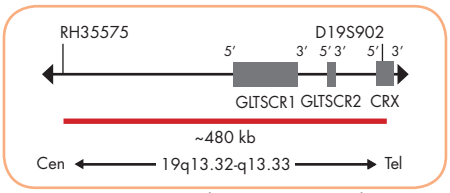
The ZytoDot ® 2C SPEC 19q13/19p13 Probe is a mixture of a Dinitrophenyl-labeled 19q13 probe specific for the region of common deletion in gliomas at 19q13.32-q13.33 and a Digoxigenin-labeled 19p13 probe specific for 19p13.3.



Ideogram of chromosome 19 indicating the hybridization locations.



SPEC 19p13 Probe map (not to scale).



SPEC 19q13 Probe map (not to scale).

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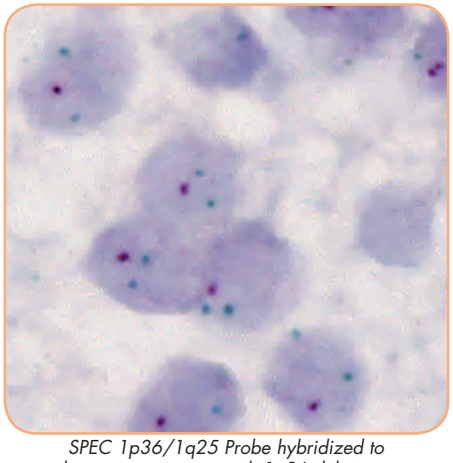
Results

In a normal interphase nucleus, using the ZytoDot ® 2C SPEC 1p36/1q25 Probe in combination with ZytoDot ® 2C CISH Implementation Kit, two red (1p) and two green (1q) signals are expected. In a cell with deletions affecting the 1p36 locus, one or no copy of the red signal will be observed.

Using the ZytoDot ® 2C SPEC 19q13/19p13 Probe in combination with the ZytoDot ® 2C CISH Implementation Kit, two red (19q) and two green (19p) signals are expected in a normal interphase nucleus. In a cell with deletions affecting the 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.

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

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

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

Prod. No.	Product	Label	Tests* (Volume)
C-3036-100	ZytoDot 2C SPEC 1p36/1q25 Probe CE IVD	DNP /Digoxigenin	10 (100 µl)
C-3036-400	ZytoDot 2C SPEC 1p36/1q25 Probe CE IVD	DNP /Digoxigenin	40 (400 µl)
C-3037-100	ZytoDot 2C SPEC 19q13/19p13 Probe CE IVD	DNP /Digoxigenin	10 (100 µl)
C-3037-400	ZytoDot 2C SPEC 19q13/19p13 Probe CE IVD	DNP /Digoxigenin	40 (400 µl)
Related Products			
C-3044-10	ZytoDot 2C CISH Implementation Kit CE IVD Incl. Heat Pretreatment Solution EDTA, 150 ml; Pepsin Solution, 1ml; Wash Buffer SSC, 150 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		10
C-3044-40	ZytoDot 2C CISH Implementation Kit CE IVD Incl. Heat Pretreatment Solution EDTA, 500 ml; Pepsin Solution, 4ml; Wash Buffer SSC, 500 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		40
WB-0009-500	Clear-it™ Stringency Buffer CE IVD		500 ml

** Using 10 µl probe solution per test. CE IVD only available in certain countries. All other countries research use only! Please contact your local dealer for more information.*

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