

## ZytoDot® 2C SPEC PTEN/CEN 10 Probe

RUO

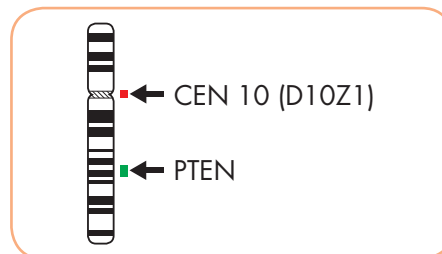
### Background

The ZytoDot® 2C SPEC PTEN/CEN 10 Probe (PD33) is intended to be used for the qualitative detection of human PTEN gene deletions and the detection of chromosome 10 alpha satellites in formalin-fixed, paraffin-embedded specimens 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).

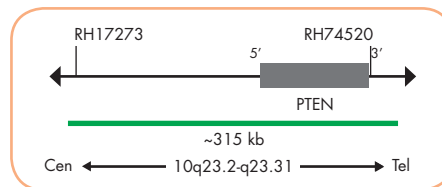
### Probe Description

The ZytoDot® 2C SPEC PTEN/CEN 10 Probe is composed of:

- Digoxigenin-labeled polynucleotides (~1.1 ng/μl), which target sequences mapping in 10q23.2-q23.31\*\* (chr10:89,440,649-89,755,790) harboring the PTEN gene region.
- Dinitrophenyl-labeled polynucleotides (~1.1 ng/μl), which target sequences mapping in 10p11.1-q11.1 specific for the alpha satellite centromeric region D10Z1 of chromosome 10.
- Formamide based hybridization buffer



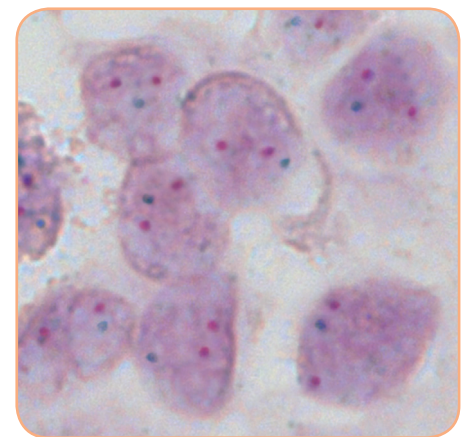
Ideogram of chromosome 10 indicating the hybridization locations.



SPEC PTEN Probe map (not to scale).

### Results

In a normal interphase nucleus, using the ZytoDot® 2C CISH Implementation Kit two red (CEN 10) and two green (PTEN) signals are expected. In a cell with a deletion of the PTEN gene locus a reduced number of green signals will be observed. Deletions affecting only parts of the PTEN gene might result in normal signal pattern with green signals of reduced size.



Example of an aberrant signal pattern: Prostate cancer tissue section with deletion of the PTEN gene as indicated by one green signal.

Prod. No.	Product
C-3053-400	ZytoDot 2C SPEC PTEN/CEN 10 Probe <span style="border: 1px solid black; padding: 0 2px;">RUO</span>

Label	Tests* (Volume)
DIG/DNP	40 (400 μl)

\* Using 10 μl probe solution per test. \*\*According to Human Genome Assembly GRCh37/hg19

RUO For Research Use Only. Not for use in diagnostic procedures.