ZytoDot® 2C SPEC TOP2A/CEN 17 Probe

RUO

Background

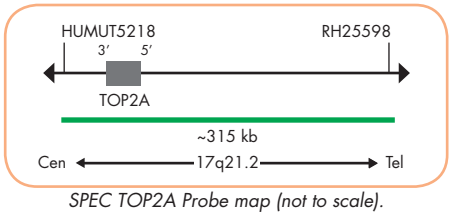
The ZytoDot® 2C SPEC TOP2A/CEN 17 Probe (PD23) is intended to be used for the qualitative detection of human TOP2A gene amplifications and the detection of chromosome 17 alpha satellites in formalin-fixed, paraffin-embedded specimens by chromogenic *in situ* hybridization (CISH). The probe is intended to be used in combination with the ZytoDot® 2C CISH Implementation Kit (Prod. No. C-3044-10/-40).

Probe Description

The ZytoDot® 2C SPEC TOP2A/CEN 17 Probe is composed of:

- Digoxigenin-labeled polynucleotides (~1.1 ng/µl), which target sequences mapping in 17q21.2** (chr17:38,501,231-38,818,030) harboring the TOP2A gene region.
- Dinitrophenyl-labeled polynucleotides (~1.1 ng/µl), which target sequences mapping in 17p11.1-q11.1 specific for the alpha satellite centromeric region D17Z1 of chromosome 17.
- Formamide based hybridization buffer

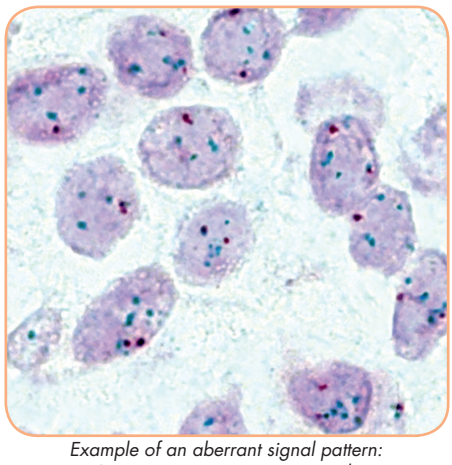
Ideogram of chromosome 17 indicating the hybridization locations.



SPEC TOP2A Probe map (not to scale).

Results

In a normal interphase nucleus, using the ZytoDot® 2C CISH Implementation Kit two green and two red signals are expected. In a cell with amplification of the TOP2A gene locus, multiple copies of the green signal or green signal clusters will be observed.



Example of an aberrant signal pattern: Breast cancer tissue section with TOP2A amplification as indicated by multiple green signals per nucleus.

Prod. No.	Product	Label	Tests* (Volume)
C-3040-400	ZytoDot 2C SPEC TOP2A/CEN 17 Probe RUO	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.*