

# ZytoDot® 2C SPEC ERBB2/CEN 17 Probe



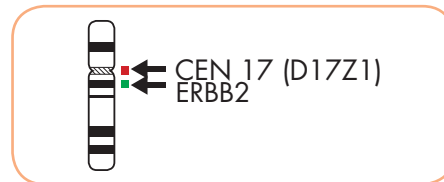
## Background

The ZytoDot® 2C SPEC ERBB2/CEN 17 Probe (PD12) is intended to be used for the qualitative detection of amplifications involving the human ERBB2 gene as well as the detection of chromosome 17 alpha satellites in formalin-fixed, paraffin-embedded specimens, such as breast cancer, 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 breast cancer and therapeutic measures should not be initiated based on the test result alone.

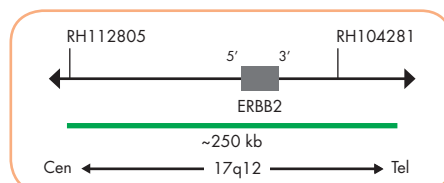
## Probe Description

The ZytoDot® 2C SPEC ERBB2/CEN 17 Probe is composed of:

- Digoxigenin-labeled polynucleotides (~1.1 ng/μl), which target sequences mapping in 17q12\*\* (chr17:37,725,661-37,973,541) harboring the ERBB2 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



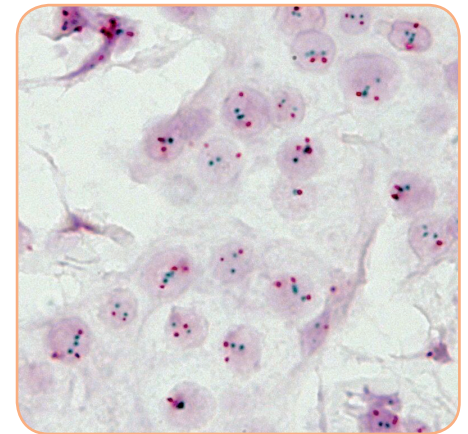
Ideogram of chromosome 17 indicating the hybridization locations.



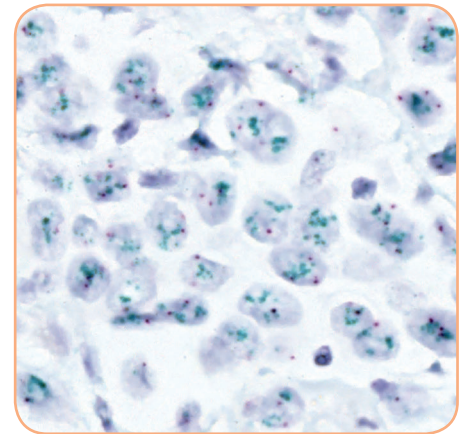
SPEC ERBB2 Probe map (not to scale).

## Results

Using the ZytoDot® 2C SPEC ERBB2/CEN 17 Probe Kit, two green (ERBB2) and two red (CEN 17) signals are expected in a normal interphase nucleus. In a cell with amplification of the ERBB2 gene locus, multiple copies of the green signal or green signal clusters will be observed.



SPEC ERBB2/CEN 17 Probe hybridized to normal interphase cells as indicated by two red and two green signals per nucleus.



Breast cancer tissue section with ERBB2 amplification as indicated by multiple green signals in each nucleus.

Prod. No.	Product	Label	Tests* (Volume)
C-3032-100	ZytoDot 2C SPEC ERBB2/CEN 17 Probe CE 0124 IVD	DIG/DNP	10 (100 μl)
C-3032-400	ZytoDot 2C SPEC ERBB2/CEN 17 Probe CE 0124 IVD	DIG/DNP	40 (400 μl)
C-3022-10	ZytoDot 2C SPEC ERBB2/CEN 17 Probe Kit CE 0124 IVD Incl. Heat Pretreatment Solution EDTA, 150 ml; Pepsin Solution, 1 ml; Probe, 0.1 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	DIG/DNP	10
C-3022-40	ZytoDot 2C SPEC ERBB2/CEN 17 Probe Kit CE 0124 IVD Incl. Heat Pretreatment Solution EDTA, 500 ml; Pepsin Solution, 4 ml; Probe, 0.4 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	DIG/DNP	40

\* Using 10 μl probe solution per test. IVD 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