ZytoDot® 2C SPEC FOXO1 Break Apart Probe

RUO

Background

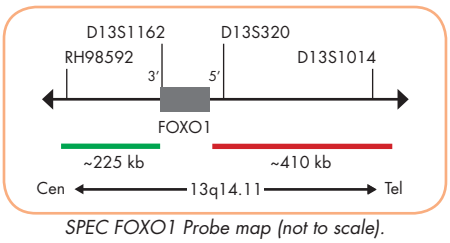
The ZytoDot® 2C SPEC FOXO1 Break Apart Probe (PD45) is intended to be used for the qualitative detection of translocations involving the human FOXO1 gene at 13q14.11 in formalin-fixed, paraffin-embedded specimens by chromogenic *in situ* hybridization (CISH). The probe is intended to be used in combination with the ZytoDot® 2C CISH Implementation Kit (Prod. No. C-3044-10/-40).

Probe Description

The ZytoDot® 2C SPEC FOXO1 Break Apart Probe is composed of:

- Digoxigenin-labeled polynucleotides (~0.50 ng/µl), which target sequences mapping in 13q14.11** (chr13:40,908,021-41,132,595) proximal to the FOXO1 breakpoint region.
- Dinitrophenyl-labeled polynucleotides (~0.75 ng/µl), which target sequences mapping in 13q14.11** (chr13:41,246,897-41,654,419) distal to the FOXO1 breakpoint region.
- Formamide based hybridization buffer

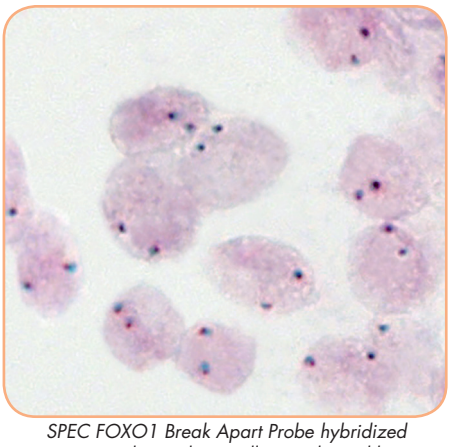
Ideogram of chromosome 13 indicating the hybridization locations.



SPEC FOXO1 Probe map (not to scale).

Results

In an interphase nucleus of a normal cell lacking a translocation involving the 13q14.11 band, using the ZytoDot® 2C CISH Implementation Kit, two red/green fusion signals are expected representing two normal (non-rearranged) 13q14.11 loci. A signal pattern consisting of one red/green fusion signal, one red signal, and a separate green signal indicates one normal 13q14.11 locus and one 13q14.11 locus affected by a translocation.



SPEC FOXO1 Break Apart Probe hybridized to normal interphase cells as indicated by two red/green fusion signals per nucleus.

Prod. No.	Product	Label	Tests* (Volume)
C-3065-100	ZytoDot 2C SPEC FOXO1 Break Apart Probe RUO	DIG/DNP	10 (100 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.*