

ZytoDot® 2C SPEC EML4 Break Apart Probe

RUO

Background

The ZytoDot® 2C SPEC EML4 Break Apart Probe (PD39) is intended to be used for the qualitative detection of translocations involving the human EML4 gene at 2p21 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).

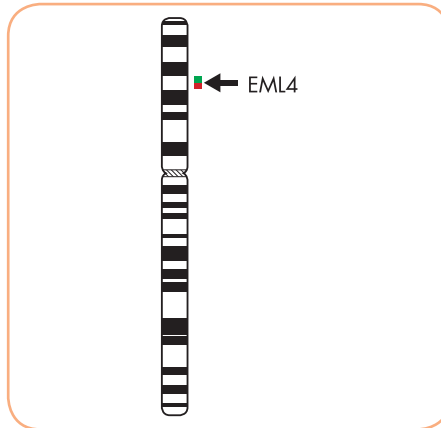
Probe Description

The ZytoDot® 2C SPEC EML4 Break Apart Probe is composed of:

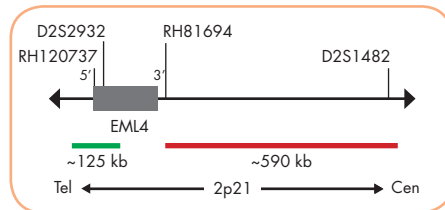
- Digoxigenin-labeled polynucleotides (~0.50 ng/µl), which target sequences mapping in 2p21** (chr2:42,342,038-42,464,761) distal to the EML4 breakpoint region.
- Dinitrophenyl-labeled polynucleotides (~0.75 ng/µl), which target sequences mapping in 2p21** (chr2:42,576,262-43,163,545) proximal to the EML4 breakpoint region.
- Formamide based hybridization buffer

Results

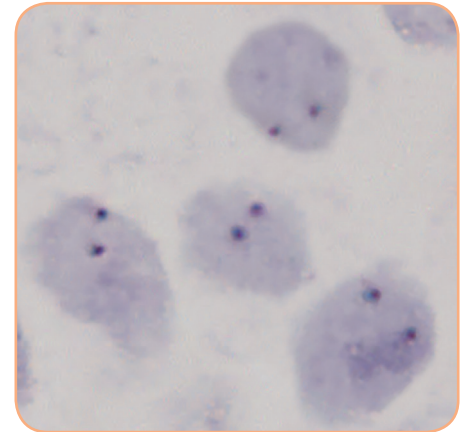
In an interphase nucleus of a normal cell lacking a translocation involving the 2p21 band, using the ZytoDot® 2C CISH Implementation Kit, two red/green fusion signals are expected representing two normal (non-rearranged) 2p21 loci. A signal pattern consisting of one red/green fusion signal, one red signal, and a separate green signal indicates one normal 2p21 locus and one 2p21 locus affected by a translocation or inversion.



Ideogram of chromosome 2 indicating the hybridization locations.



SPEC EML4 Probe map (not to scale).



SPEC EML4 Break Apart Probe hybridized to normal interphase cells as indicated by two red/green fusion signals per nucleus.

Prod. No. Product

C-3059-400 ZytoDot 2C SPEC EML4 Break Apart Probe **RUO**

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.