

XL BCL3 BA

Break Apart Probe

Order No.:
D-5128-100-OG

Description

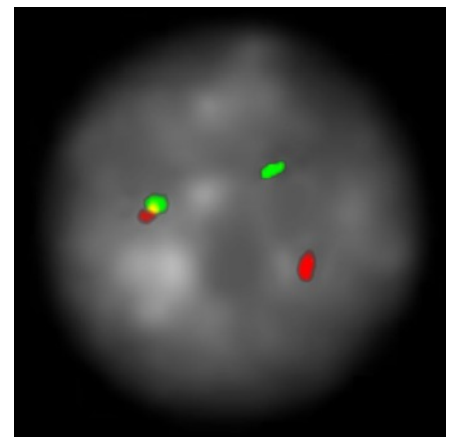
XL BCL3 BA is designed as a break apart probe. The orange labeled probe hybridizes proximal to the breakpoint in the BCL3 gene region at 19q13.3, the green labeled probe hybridizes distal to the breakpoint and spans the PVRL2 gene.

Clinical Details

Chronic lymphocytic leukemia (CLL) is the most common leukemia in adults. The clinical course is heterogeneous and ranges from good outcome to very aggressive and fast progressing disease. CLL is not characterized by a well-defined chromosomal translocation as many other lymphoid neoplasms. The most frequent aberrations are deletions on 6q21 (3-6%), 11q22-23 (5-20%), 13q14.3 (>50%) or 17q13.1 (3-8%) and trisomy 12 (10-20%). The recurrent $t(14;19)(q32.3;q13.3)$ is a rare event with an incidence of <0.1% in B-cell neoplasms and is often associated with trisomy 12 or a complex karyotype. It is considered as a poor prognostic marker in CLL with inferior outcome. The translocation juxtaposes BCL3 with the immunoglobulin heavy chain gene region on chromosome 14 resulting in overexpression of BCL3. BCL3 is an oncogene and is involved in the regulation of NF-kappa-B target genes. Since it is difficult to obtain metaphases from CLL patients, interphase FISH offers great advantage over conventional cytogenetics.

Literature:

- Michaux et al (1996) Genes Chrom Can 15:38-47
- Huh et al (2011) Am J Clin Pathol 135:686-696
- Puiggros et al (2014) Biomed Res Int 2014:Article ID 435983

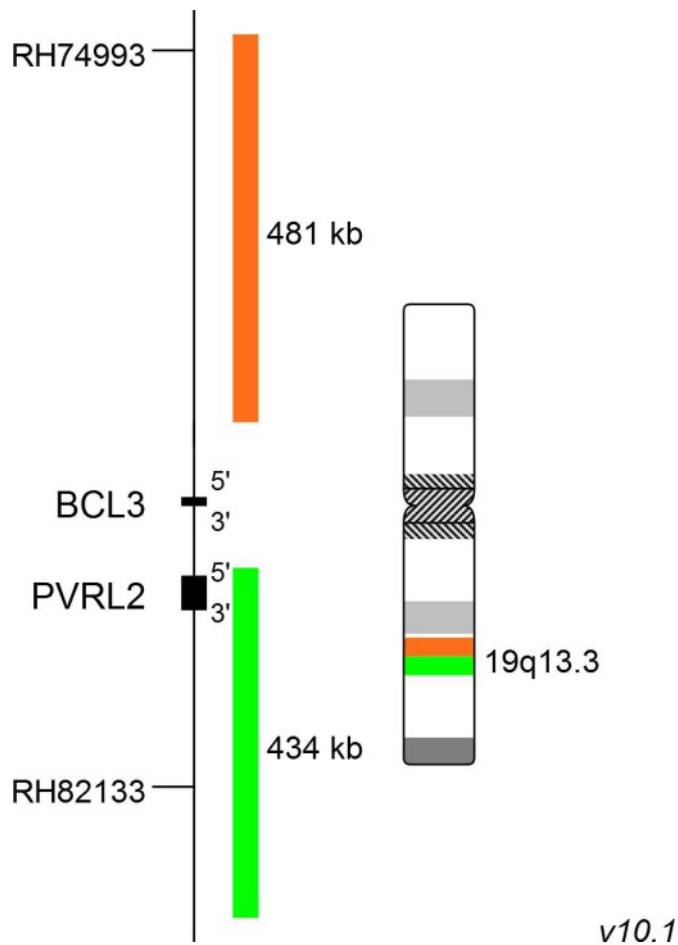


XL BCL3 BA hybridized to bone marrow cells. One aberrant interphase is shown. The expected normal signal pattern of XL BCL3 BA is two orange-green colocalization/fusion signals representing the two non-aberrant BCL3 loci. Translocations as $t(14;19)(q32;q13)$ are separating one orange-green colocalization/fusion resulting in one green, one orange and one orange-green colocalization/fusion signal. The image above is showing the classical aberrant signal constellation 1G101GO.

Clinical Applications:

- CLL

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Further Information or Request Assistance

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Document No. PFS-D5128-08-01-S
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