



**ampli set Lymphoma Cells** <sup>CE IVD</sup> **45 tests** **cat 1404**  
 detection of translocation t(14;18) Bcl2/IgH

The interchromosomal translocation t (14;18) is present in up to 85% of patients with follicular lymphomas and 30% of patients with diffuse non-Hodgkin's lymphoma (NHL). In this translocation the BCL2 proto-oncogene on chromosome 18 is translocated to the Ig heavy chain (IgH) region on chromosome 14, creating a hybrid BCL2/IgH gene product. The chromosomal breakpoints on bcl-2 have been shown to cluster at two main regions 3' to the bcl-2 coding region. The major breakpoint region (MBR) is located within the 3' untranslated region and the minor cluster region (mcr) is located some 20Kb downstream. Using the polymerase chain reaction (PCR) with oligonucleotide primers directed against the MBR or the mcr and the consensus J region of the Ig heavy chain locus one lymphoma cell with this translocation can be detected in up to 105 normal cells.

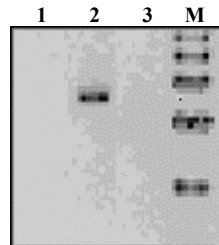
**Principle of method:** A) extraction of genomic DNA; B) amplification; C) detection on agarose gel  
**Applicability:** on extracted and purified genomic DNA from whole blood samples or tissue

**ANALYSIS OF RESULTS**

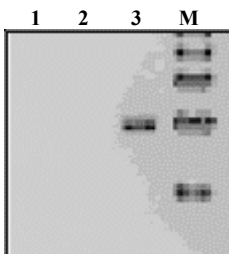
Positive samples for the Bcl2 /IgH rearrangement give a discrete band between 100-600 bp for MBR and mcr

**BCL2/IgH  
 major breakpoint region - MBR**

Positive samples for the BCL2/IgH rearrangement give a discrete band between 100-600 bp.



1-3: Absence of translocation BCL2(MBR)/IgH  
 2: presence of translocation BCL2(MBR)/IgH  
 M: Marker 100bp ladder



1,2: Absence of translocation BCL2(mcr)/IgH  
 3: presence of translocation BCL2(mcr)/IgH  
 M: Marker 100bp ladder

**BCL2/IgH  
 minor breakpoint region - mcr**

Positive samples for BCL2/IgH rearrangement give a discrete band between 100-600 bp.

**REFERENCES**

*Cancer* **33**:1382(1974)  
*Science* **266**:1097 (1984)  
*Blood* **78**:3275-3280 (1991)  
*Genomics* **73**:161-170 (2001)