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CE

KIT FOR THE DETECTION OF TRANSLOCATION T(11;14)(Q13;32) IN MANTLE LYMPHOMA

AMPLI SET LYMP.MANT. t(11;14)(Q13;Q329) Cat. n.1.408

Mantle cell lymphoma (MCL) accounts for approximately 6% of all non-Hodgkin's lymphomas. MCL patients have a median age of over 60 years, a male predominance. Cell Proliferation involves B cells , that express markers as CD19, CD20, CD22 e CD79A.The WHO classification defines MCL clearly, comprising two main morphological subtypes , typical and blastoid (blastic) variant , with respectively low and a high mitotic index. A number of distinct genetic and biological alterations are associated with this disease. Peculiar feature , present in all types, is the translocation t(11;14)(q13;q32) where the rearrangement of genomic DNA involves the Bcl1 region, located on chromosome 11 ,about 120 kb from the gene coding for cyclin D1(CCND1,PRAD1) and the IgH "joining" region on chromosome 14.
The t(11;14) determines the deregulated expression of cyclin D1 in lymphoid cells, due to the juxtaposition of the gene to the strong B-cell IgH transcription enhancers. Cyclin D1 is a protein involved in the G1-S transition of cell cycle. The iper expression is therefore responsible of the high mitotic index of cancer cells.
The kit allows the detection of the translocation (11;14) (q13;q32) with the PCR technique on genomic DNA extracted by blood or tissue. The use of primers directed to the IgJH region and to MTC region , major translocation cluster, located on chromosome 11, lets the detection of the rearrangement . The product of PCR of about 550-650 bp is detectable only if the translocation is present.

Principle of method: A) extraction of genomic DNA B) amplification C)enzymatic digestion D)detection on agarose gel
Applicability: On extracted and purified genomic DNA from whole blood samples or tissue
Tests: 45

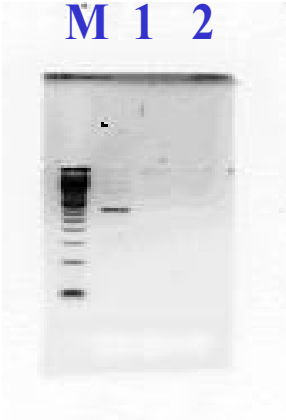
REAGENTS AND STORAGE

AMPLIFICATION and DIGESTION	
PCR MIX	-20°C
sterile H_2O	-20°C
Taq Polymerase (5U/µl)	-20°C
T(11;14) positive CTR	-20°C
Negative control	-20°C

Stability: over 12 months if correctly stored.

ANALYSIS OF RESULTS

The PCR product is about 550-650 bp detectable only if the translocation is present. The kit provides a negative control where the PCR product is absent.



1 presence of translocation	2 absence of translocation
1 band 550-650 bp	Absence of PCR product

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