

IDENTIFICATION OF T-CELL MONOCLONALITY

AMPLI-SET-Lymphoma T Cat. n. 1.401

The AMPLI lymphoma-T kit allows to identify, thanks to Polymerase Chain Reaction (PCR), the rearrangements of γ gene of the T cells receptors (TCR γ) in normal and neoplastic lymphocytes. The primers used are : **TCR γ V2-V3-V4-V5- V8-V9-V10-V11-V12** homologus to every segment TCR γ V and **JGT1-2-3-4** homologus to “joining (J)” segment. The monoclonality in a T-cell population is shown by the presence of a single amplified fragment after electrophoresis on agarose gel. In the case of a polyclonal population the amplification product will be generated by an high number of rearranged Ig genes that will give rise to fragments of different length. The polyclonality will be shown on agarose gel by the presence of a smear band.

Principle of assay: A) extraction on genomic DNA B) amplification C) rivellation on agarose gel.

Applicability: on extracted and purified genomic DNA from whole blood samples.

Number of tests: 45.

REAGENTS AND STORAGE

AMPLIFICATION

Mix PCR TCR V2, 3, 4, 8, 9	-20°C
Mix PCR TCR V5, 10, 11, 12	-20°C
H ₂ O sterile	-20°C
Taq Polymerase (5U/ μ l)	-20°C
Control DNA V5-12	-20°C

Stability: over 12 months if correctly stored.

ANALYSIS OF RESULTS

MONOCLONAL PATTERN index of a lymphoproliferative disease
MONOCLONAL PATTERN index of a lymphoproliferative disease

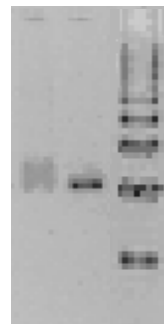
The samples generate one or two discrete bands in a range 170 230 bp for TCR V2, 3, 4, 8, 9 and TCR V5, 10, 11, 12.

POLYCLONAL PATTERN index of a normal condition

The samples generate a smear amplified in a range of 170 230 bp for TCR V2, 3, 4, 8, 9 and TCR V5, 10, 11, 12.

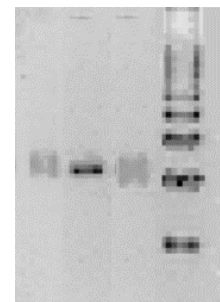
TCR V2, 3, 4, 8, 9

1 2 M



TCR V5, 10, 11, 12

1 2 3 M



References:

Blood **78**:192-196 (1991)

J Clin Pathol **45**:770-775.(1992) 4 (1996)

1) polyclonal pattern
2) monoclonal pattern
M) Marker 100bp ladder

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2) monoclonal pattern
3) pattern policlionale
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