

IDENTIFICATION OF TRANSLOCATION t(2;5) NPM/ALK

AMPLI-SET NPM/ALK
n. 1.400.2

Cat.

The anaplastic large cell lymphoma (ALCL), recognized as a subtype of Non-Hodgkins (NHL) lymphoma, is associated, in the 75% of cases, with a translocation t(2,5)(p23; q35) that leads to the formation of a chimeric gene NPM-ALK, with consequent nuclear and cytoplasmatic expression of the kinase protein ALK, which is normally not expressed in the hematopoietic tissue.

The Ampli-SET-NPM/ALK kit allows to identify, thanks to Reverse Transcription-Polymerase Chain Reaction (RT-PCR), the translocation t(2,5). The analysis of the fusion transcript NPM/ALK

The analysis of the NPM/ALK fusion transcript is based on primers design on opposite sites of fusion regions so that the PCR product will include the specific fusion sequence.

Principle of assay:

- extraction of RNA
- retro-transcription
- amplification
- detection on agarose gel

Applicability: extracted and purified RNA

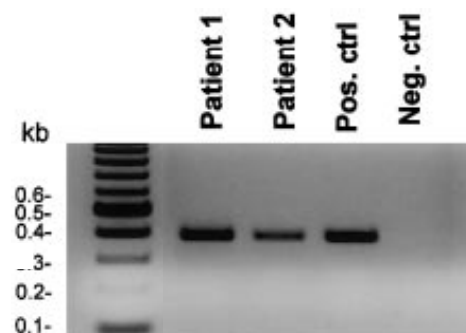
Number of tests: 45.

ANALYSIS OF RESULTS

The positive samples for the rearrangement NPM-ALK will produce a 429 bp band

REAGENTS AND STORAGE

RETROTRANSCRIPTION	
Mix RT	-20°C
Reverse Transcriptase (40U/μl)	-20°C
Rnase inhibitor (40U/μl)	-20°C
Random primers	-20°C
RNase/DNase –free water	-20°C
AMPLIFICATION	
Mix PCR NPM/ALK	-20°C
Taq Polymerase (5U/μl)	-20°C
RNase/DNase –free water	-20°C
Positive control	-20°C



STABILITY: OVER 18 MONTHS IF CORRECTLY STORED

References:

- Downing JR et al. Blood 85:3416-3422, 1995
 Gascoyne RD et al. Blood 93:3913-3921, 1999
 Morris SW et al. Science 126:1281-1284, 1994
 Morris SW et al. Oncogene 14:2175-2188, 1997
 Sarris AH et al. Blood 88:1771-1779, 1996
 Ting-Lei Gu et al. Blood 103:4622-4629, 2004