

METHYLATION STATUS OF DAP-kinase GENE PROMOTOR DETECTION BY REAL TIME PCR

AMPLI-SET-DAP-kinase RT

Cat. n. 1.422RT

The methylation of the residues of cytosine in the “CpG islands” is very important for the regulation of the genic expression. The hypermethylation of the “CpG islands” in the promoter region of a gene suppress the transcription of the same gene. In many tumours the hypermethylation of the promoter of the suppressor genes, as p16, p15, E-cadherine and other genes as “DAP-kinase”, inhibitor gene of the metastatic progression, O⁶-methylguanine DNA methyltransferase (MGMT), gene involved in the repair of DNA, Glutathione-S-transferasi (GSTP1) involved in the prevention of the oxidative damage of DNA, etc has been showed.

Bladder cancer is the second most common urological neoplasia in the west world. Over 70% of tumours are superficial, because limited to the innermost lining of the and only a few per cent becomes invasive cancer. The superficial cancer, however, may be relapsing. It is important the detection of molecular marker to predict the relapsing and prognosis of tumours. Recently, the role of methylation status of DAP-Kinase gene promoter in bladder tumourgenesis has been highlighted.

The kit allows the detection of the methylation of the promoter of the DAP-kinase gene.

The principle of the assay is the extraction of genomic DNA from serum, or plasma or tissue, the treatment with bisulphite sodium in order to convert the unmethylated residue of cytosine in uracil, the PCR amplification with specific oligonucleotides for the methylated sequences and unmethylated sequences using the Real Time PCR technique.

Principle of assay : A) isolation of genomic DNA B) bisulfite modification C)Real-Time PCR

Applicability: on DNA isolated from samples of serum/plasma or fresh/paraffin-embedded specimen

Number of Test: 24.

KIT CONTENTS AND STORAGE

AMPLIFICATION

Mix PCR METHYLATED	-20°C
Mix PCR UNMETHYLATED	-20°C
H ₂ O Sterile	-20°C
Taq Polymerase (5U/μl)	-20°C
Unmethylated DNA control	-20°C
Methylated DNA control	-20°C

Stability: over 18 months if correctly stored

References:

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ANALYSIS OF RESULTS

