The sensitivity of DNA cleavage by *SnoI* to methylation by *M·EcoK*

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The recognition sites for *SnoI* (1) and *M·EcoK* (1) can overlap in such a way that one of the two A's of the *SnoI* sequence is methylated. Figure 1a shows such an overlap as occurring in a mutant human interleukin-2 gene (2). Using this DNA we have reported recently (2) that methylation at this position does not interfere with cleavage by *ApaI*, an isoschizomer of *SnoI* (1). Here we show that both isoschizomers behave identically with respect to this DNA modification. As can be seen from figure 1b, the restriction patterns of the methylated DNA produced by both enzymes are virtually identical. In particular the appearance of the 917 bp and 880 bp fragments indicates cleavage at the modified site.

Figure 1. a: Overlap of *SnoI* and *EcoK* sites as occurring in the test DNA substrate. The *SnoI* site is boxed with cleavage positions indicated by arrows. The *EcoK* heptanucleotide, separated by a 6 bp spacer, is overlined by bars. A's modified by *M·EcoK* are marked with asterisks. b: Incubation of the test DNA substrate with *ApaI* and *SnoI*. Numbers above the lanes denote the incubation times in min. M1 = covalently closed circular (ccc), open circular (oc) and linear (lin) forms of the test plasmid. M2 = linear marker fragments. Their sizes and the sizes of the final cleavage products in base pairs (bp) are indicated at the right and left margin, respectively.

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REFERENCES

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