

Letter to the Editor

**Allele Frequencies of MYCL and MYB Protooncogenes
in Unrelated Healthy Japanese**

To the Editor:

Polymorphic DNA segments detected by restriction fragment length polymorphisms (RFLPs) are used as markers for inherited human diseases, and also for studying malignancies, the objective being to search for possible associations with tumor predisposition and/or progression. We studied the allele frequencies of MYCL and MYB in unrelated healthy Japanese. In the two loci, *EcoRI* RFLPs which were explained by a diallelic system have been reported (Table 1).

The RFLPs of MYCL and MYB were studied using Southern blot analyses in the *EcoRI*-digested placental DNAs (27 males and 24 females) obtained from 51 healthy Japanese obstetrical patients. The Mendelian inheritance was confirmed in peripheral blood samples obtained from 6 members of a single family. Probes were prepared from the following plasmids: Vector/probe size/cloning site is pJB327/1.8 kb/*SmaI-EcoRI* for MYCL (Nau *et al.*, 1985) and pBR322/2.6 kb/*EcoRI* for MYB (Franchini *et al.*, 1983), kindly provided by Dr. J. D. Minna and Dr. S. R. Tronick through the Japanese gene bank of JCRB, respectively.

The allele frequencies obtained are presented in Table 1. Data on European Caucasians are listed for comparison. Differences between Japanese and Caucasians were not statistically significant in both loci by chi-square test and between Japanese males and females (MYCL: $p > 0.5$, MYB: $p > 0.1$, data not shown). The frequency of MYCL alleles was also obtained in a larger number of Japanese, A1: 0.46 and A2: 0.54, by Dr. M. Yamada (Natl. Children's Med. Res. Ctr., personal communication), which was consistent with our result. Our data confirmed the reports on European Caucasians in Table 1, suggesting the RFLPs of these genes occurred before differentiation of human races.

Table 1. Allele frequencies of two protooncogenes, MYCL and MYB, in unrelated Japanese and in Caucasians.

Symbol	Allele size (kb)	N° CHR	Japanese freq	N° CHR	Caucasian freq	χ^2 (p)
MYCL	A1 10	102	0.41	90 ^a	0.43	0.079
	A2 6.6		0.59		0.57	(>0.7)
MYB	A1 2.6	102	0.44	98 ^b	0.48	0.322
	A2 1.55, 1.05		0.56		0.52	(>0.5)

^a Farndon and Simmons (1987), ^b Dozier *et al.* (1986).

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