

Table I: Mutation Frequency Induced by Different Polymerases

template	enzyme	total plaques	mutants	mutation frequency ( $\times 10^{-4}$ )	error rate <sup>a</sup>
DNA	Pol I	11 703	14	12.0	1/29000
	MLV RT	10 021	12	12.0	1/29000
	HIV RT	9 508	45	47.3	1/5900
RNA	Pol I	9 758	12	12.3	1/28000
	MLV RT	10 888	11	10.1	1/37000
	HIV RT	34 625	141	40.7	1/6900

<sup>a</sup>The error rate was calculated by subtracting the background mutant frequency of  $3 \times 10^{-4}$  from the observed frequency, divided by the target size of 80 bases, and the mutation detection factor of 0.35, which represents the fraction of possible nucleotide substitutions yielding detectable changes in *lacZ* $\alpha$  gene expression. Pol I refers to the large or Klenow fragment of *E. coli* DNA polymerase I.