Table 1. Fidelity of HIV-1 and AMV reverse transcriptases and cellular DNA polymerases in a base subsitution reversion assay. The background revertant frequency for the assay was 2×10^{-6}. Error rates are calculated by subtracting the background, correcting for the expression [60%, see (*8*)] of errors in the complementary (minus) strand, and dividing by the number of detectable sites (three) [see (*8, 18*)]. The AMV RT data are from (*17*); polymerase α–primase (*13*); polymerase β and polymerase δ (*10*); and polymerase γ (*8*). Multiple experiments with the same enzymes indicate that the M13mp2-based mutation assays are highly reproducible with standard deviations that are usually between 10% and 20% of the mean value [for example, see (*19*)].

Enzyme	Plaques scored		Revertant frequency ($\times 10^{-6}$)	Error rate
	Total	Blue		
Recombinant HIV-1 RT	730,000	75	100	1/18,000
AMV RT	370,000	29	78	1/24,000
Polymerase α–primase (calf thymus)	370,000	84	230	1/8,000
Polymerase β (rat hepatoma)	84,000	151	1800	1/1,000
Polymerase δ (calf thymus)	2,300,000	12	5.2	1/1,700,000
Polymerase γ (chick embryo)	600,000	5	8.3	1/290,000