

Supplemental Table 2. Description of DNA Polymerases Used.

Processive		Klenow exo ⁻	Fragment of <i>E. coli</i> DNA Pol I; DNA repair polymerase; lacks exo
		T4 DNA Polymerase	T4 phage replicative polymerase; possesses 3' to 5' exo activity
		Human Pol δ	Lagging strand replicative polymerase; 3' to 5' exo activity ^a
Distributive	Translesion	Human Pol η	Y-family translesion polymerase; responsible for bypass of CPDs ^a
		<i>S. cerevisiae</i> Pol η	Y-family translesion polymerase; responsible for bypass of CPDs ^b
		Human Pol κ	Acts at abasic sites; low fidelity ^a
		Human Pol μ	Located in peripheral lymphoid tissues; potential hypermutase ^a
	Other	Human Pol β	Gap filling polymerase; involved in base excision repair ^a

^a Hubscher, U., Maga, G., and Spadari, S. (2002) Eukaryotic DNA Polymerases. *Annu. Rev. Biochem.* **71**, 133-163

^b Johnson, R.E., Prakash, S., and Prakash, L. (1999) Efficient bypass of a thymine-thymine dimer by yeast DNA polymerase, Pol eta. *Science* **283**, 1001-1004