

Table S3
DNA Polymerases

POLD	3'-5' exonuclease that proof-reads DNA and excises mis-matched nucleotides ¹
POLG	mitochondrial DNA repair ²
POLH	p53-activated enzyme that repairs DNA following with UV damage ³
POLI	active at targeted breaks ⁴
POLL	nuclear DNA repair in eukaryotic cells ⁵
APEX1	repair of DNA damage during oxidative stress ⁶

¹ Shen, Y. et al. (2004) A 21-amino acid peptide from the cysteine cluster II of the family D DNA polymerase from *Pyrococcus horikoshii* stimulates its nuclease activity which is Mre11-like and prefers manganese ion as the cofactor. *Nucleic Acids Res* 32 (1), 158-168.

² Hudson, G. and Chinnery, P.F. (2006) Mitochondrial DNA polymerase-gamma and human disease. *Hum Mol Genet* 15 Spec No 2, R244-252.

³ Flanagan, A.M. et al. (2007) The human POLH gene is not mutated, and is expressed in a cohort of patients with basal or squamous cell carcinoma of the skin. *Int J Mol Med* 19 (4), 589-596

⁴ Gearhart, P.J. and Wood, R.D. (2001) Emerging links between hypermutation of antibody genes and DNA polymerases. *Nat Rev Immunol* 1 (3), 187-192

⁵ Garcia-Diaz, M. et al. (2000) DNA polymerase lambda (Pol lambda), a novel eukaryotic DNA polymerase with a potential role in meiosis. *J Mol Biol* 301 (4), 851-867

⁶ Saitoh, T. et al. (2001) Enhancement of OGG1 protein AP lyase activity by increase of APEX protein. *Mutat Res* 486 (1), 31-40.