

Table S2. Protein-Pol β (wild and mutant types) binding affinity scores

PDB id	Protein name	Binding affinity (kcal/mol)	
		Wild type Pol β	Mutant Pol β (Pol $\beta\Delta$)
1EBM	Human 8-oxoguanine glycosylase (HOGG1)	-7	-7.2
1TDH	Human endonuclease VIII-like 1	-9.7	-12.4
1WSR	Human T-protein of glycine cleavage system (aminomethyltransferase)	-12.4	-11.1
1XNA	Single-strand break repair protein XRCC1	-13	-13.9
2BRF	Polynucleotide kinase 3'-phosphatase (PKNP)	-12.9	-13.4
2FOZ	Poly(ADP-ribose) glycohydrolase (ADPRH)	-11.9	-12.1
2RCW	Poly(ADP-ribose) polymerase 1 (PARP-1)	-9.3	-9.2
3Q8K	Human flap endonuclease 1 (FEN1)	-7	-7.2
4ZZY	Poly(ADP-ribose) polymerase 2 (PARP-2)	-12.4	-11.7