

Supplemental Table 1. Effect of DNA substrates on nucleotide binding affinity of MutS β . Binding of ATP or ADP to the MSH2 and MSH3 subunits of MutS β was determined by UV cross-linking analysis as described in Experimental Procedures. MutS β was incubated with [α - 32 P]-ATP or [α - 32 P]-ADP on ice for 10 min, subjected to 10 min UV cross-linking, followed immediately by fractionation in 8% SDS-PAGE gels. Radiolabeled bands were detected and quantified using a Phosphor Imager (Molecular Dynamics). Data presented in this Table were derived from gels shown in Fig. 3B (ATP binding) and Fig. 3C (ADP binding). Relative binding affinity was calculated by dividing the 32 P intensity of individual MSH2 or MSH3 subunits with that of the same subunit in non-DNA-containing reactions and multiplying by 100. N.D., not determined; UD, undetectable.

Nucleotide	Subunit	- Mg $^{2+}$					+ Mg $^{2+}$				
		- DNA	Homo	ID	CAG	CTG	- DNA	Homo	ID	CAG	CTG
ATP	MSH3	100	N.D.	39	40	39	100	N.D.	230	216	200
	MSH2	100	N.D.	42	42	43	100	N.D.	340	329	320
ADP	MSH3	UD	UD	UD	UD	UD	100	60	62	67	63
	MSH2	100	106	104	96	98	100	83	82	86	84