

**Table I.** Rate of steady-state ATPase activity and burst amplitude of first hydrolytic turnover of ATP in the rapid quench ATPase assay at 0°C for the wild type and amino acid 38 mutants in the absence of DNA and in the presence of G.T mismatch containing DNA.

	<b>No DNA</b>		<b>G.T mismatch</b>	
	Rate (min <sup>-1</sup> )	Amplitude (ATP/monomer MutS)	Rate	Amplitude (ATP/monomer MutS)
<b>WT</b>	0.78 ± 0.17	0.57 ± 0.07	0.75 ± 0.31	0.14 ± 0.04
<b>E38A</b>	0.52 ± 0.10	0.58 ± 0.16	1.17 ± 0.45	0.62 ± 0.01
<b>E38T</b>	0.50 ± 0.03	0.59 ± 0.10	1.09 ± 0.25	0.07 ± 0.06
<b>E38Q</b>	0.69 ± 0.14	0.65 ± 0.06	1.47 ± 0.29	0.10 ± 0.05