## **Supporting Information**

## Martinez and Kolodner 10.1073/pnas.1000798107

Table S1. Genetic properties of the msh6-R1024C mutation

## Mutation rate

Strain no.	Genotype	Thr <sup>+</sup>	Lys <sup>+</sup>	Can <sup>r</sup>
RDKY3590 RDKY3684	Wild-type msh6∆	$2.01 \times 10^{-9}$ (1) $3.55 \times 10^{-8}$ (18)	$1.55 \times 10^{-8}$ (1) $1.69 \times 10^{-6}$ (109)	$1.13 \times 10^{-7}$ (1) $1.59 \times 10^{-6}$ (14)
RDKY7113	msh6-R1024C	$9.82 \times 10^{-8}$ (53)	$1.87 \times 10^{-5} (1,208)$	$1.39 \times 10^{-6} (14)$ $1.27 \times 10^{-6} (12)$

The number in parentheses is the fold-increase in mutation rate relative to the wild-type strain RDKY3590. Note that the increased rate of reversion of the hom3-10 (Thr $^+$ ) and lys2-10A frameshift mutations caused by the msh6-R1024C mutation relative to that caused by the msh6 $\Delta$  mutation is indicative of a dominant msh6 mutation as described in ref. 31.