## A. MSH3 logarithmic culture Day 14

## B. MSH3 stationary culture Day 14

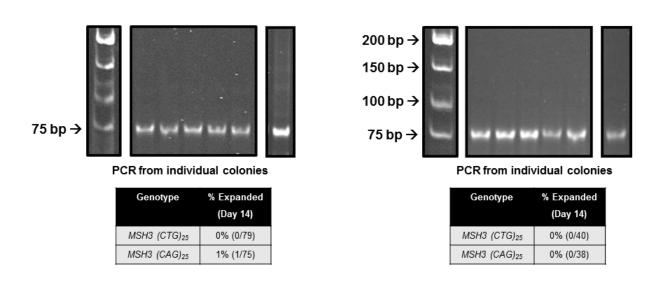


Figure S7. Liquid time course experiments in *MSH3(CTG)*<sub>25</sub> and *MSH3(CAG)*<sub>25</sub> logarithmic and stationary cultures to determine population tract dynamics. We performed time course experiments with *MSH3* strains containing *unexpanded CTG* and *CAG* tracts in **A.** logarithmic and **B.** stationary phase cultures. Tract sizes were confirmed by PCR prior to starting the experiment. **Top panel:** Samples from Day 14 cultures were plated on minimal media lacking histidine to obtain individual colonies. Colony PCR was performed to amplify the TNR tract from colonies to determine individual tract lengths within the population. The arrows indicate tracts that have incurred an additional expansion. The number below

each tract indicates the number of repeats within each tract. Control PCR reactions using the TNR plasmid (C) were performed alongside each set as a marker for the 75 base pair (bp) tract (25 repeats). Summary of expansion frequency at Day 14 in the different genetic backgrounds tested, based on PCR amplification of tracts from individual colonies. Mutation rates from these data were calculated and are shown in **Table 1**.