

**Figure S4.** The processivity of reverse transcription of the 5' portion of the TLC1 template region is increased in the *rnr1-Q288E* and *rnr1-Q288A* mutants. (A) Schematic illustrating the reverse transcription of the 5' portion of the TLC1 template region, which is shown in the boxed area. Almost all telomeric repeats contain a GGG trinucleotide, but only about 50% of these repeats also contain the GG dinucleotide specified by the 5' portion of the template region. (B) The ratio of GG-containing repeats (i.e. TGGGTGTGGT) to non-GG-containing repeats (i.e. TGGG(TG), TGGGT) is shown for a wild type strain and the four *rnr1* mutants. The *rnr1-Q288E* and *rnr1-Q288A* mutants, which have elongated telomeres, exhibit an increase in the presence of GG-containing repeats, indicating that telomerase repeat addition processivity for the 5' portion of the TLC1 template region is increased. *P* values were determined using a chi-squared test to look whether the ratio in the mutant was significantly different from the wild type ratio.