		Telomere length (bp)	Clones sequenced	Divergent sequences	Percent
Plasmid cloned		166 213 166 + 213	67 63 130	3 2 5	4.5 3.2 3.8
Internally integrated in WT	 	166 230 166 + 230	123 138 261	5 6 11	4.1 4.3 4.2
Internally integrated in rad52∆ mutants	//->>> //	166 230 166 + 230	175 169 344	13 12 25	7.4 7.1 7.3

Figure S2. Measuring sequence divergence after PCR amplification, cloning and sequencing of telomere sequences of defined length. Two plasmids containing telomeres sequences, 166 bp and 213 bp in length, were amplified by PCR, re-cloned into the same vector, and sequenced. Two telomeres, 166 bp and 230 bp in length, were also inserted at the URA3 locus in wild-type and $rad52\Delta$ strains. The resulting strains were clonally propagated for ~30 population doublings, and the inserted telomeres were then amplified by PCR, cloned, and sequenced. Sequence divergence was determined using the same rules for the identification of divergent sequences amplified from a specific telomere (i.e. telomere VI-R) from a population of cells (see Materials and Methods).