**Fig. S1. Bipyridine and TU do not affect cell viability or time to colony formation under MBR assay conditions.** Reconstruction experiments, using SMR4562, in which a Lac+ indel revertant and three *lac-*amplified strainswere mixed with ∆*lac* scavenger cells and plated in precise reconstructions of mutant selection conditions show that neither treatment with TU nor 2'2-bipyridine reduces **(A)** cell viability or **(B)** the speed of formation of Lac+ revertant colonies under experimental assay conditions. The data indicate that reductions in yields of Lac+ colonies in MBR experiments with TU or bip treatment reflect reduction of mutagenesis, not inability of mutant cells to form colonies in the presence of those ROS-reducing agents. Left panels, bip treatment; right panels, TU treatment.

