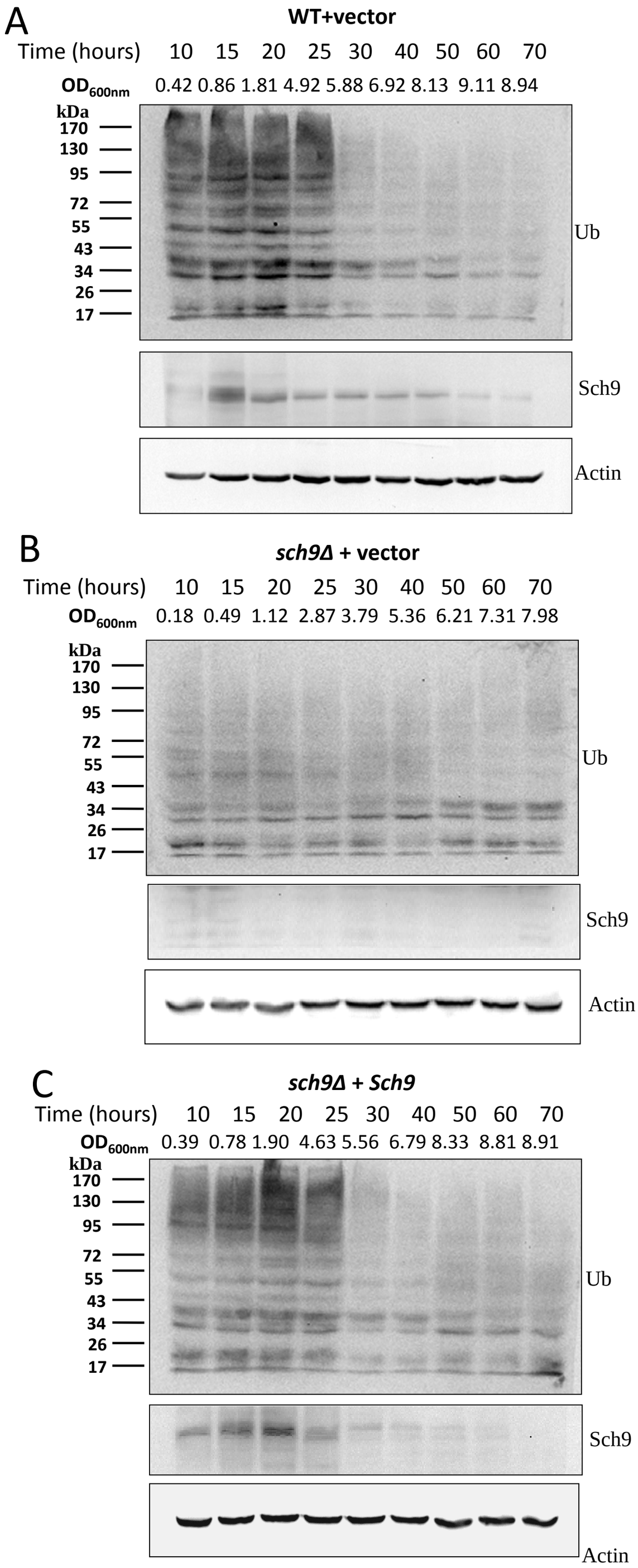
Figure S1



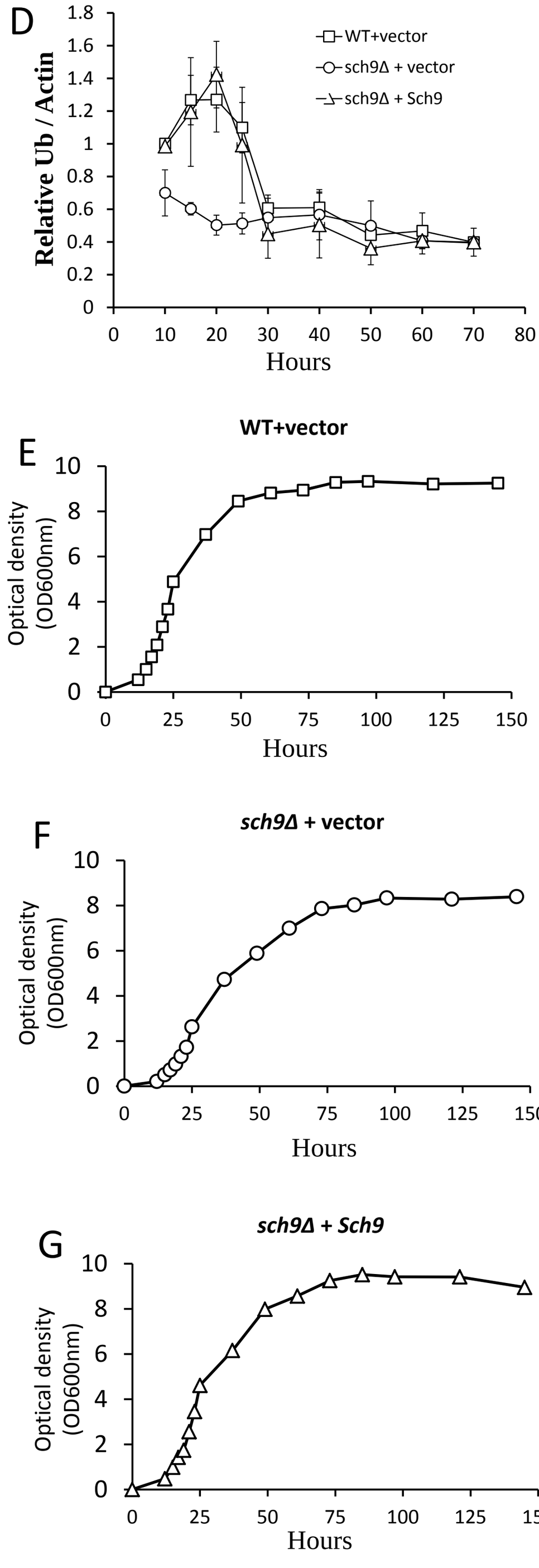


Figure S1. Protein ubiquitination and growth characters of WT (TB50a) and *sch9Δ* (TS120-2d) cells transformed with *pRS416-SCH9* or empty vector were monitored in SDC. (A-C) The levels of ubiquitinated proteins of indicated strains at indicated times after inoculation were tested by western blotting with actin as the loading control. The expression of Sch9 was also detected. Their OD_{600nm} was recorded at indicated time. Gels were blot on to a single PVDF membrane for comparisons between gels. (D) The quantifications of three repeats from panel A to C. (E-G) Growth curves of indicated strains.

Figure S2

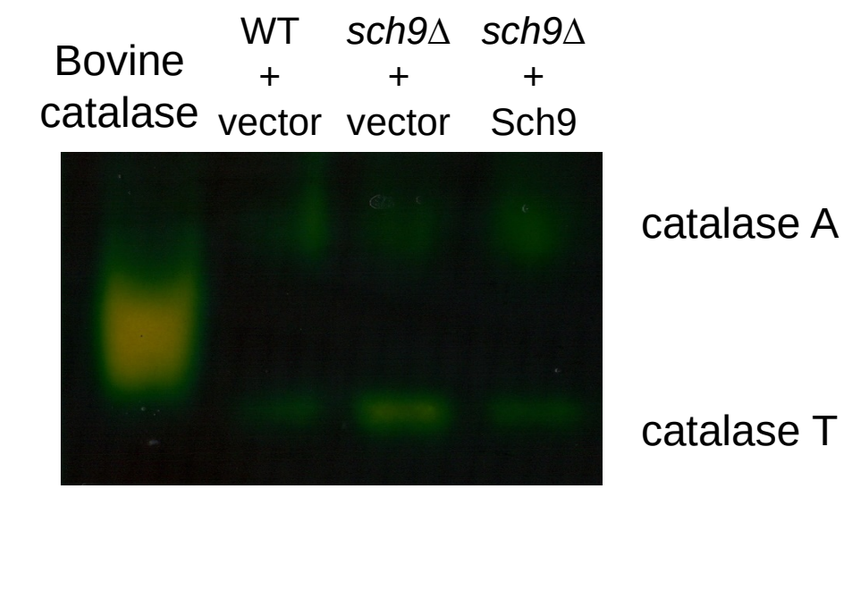


Figure S2. Catalase activities in WT (TB50a) and *sch9Δ* (TS120-2d) cells transformed with *pRS416-SCH9* or empty vector were analyzed by native gel electrophoresis (A) followed by the quantification (B). 10 U of bovine catalase was loaded as control.

Figure S3

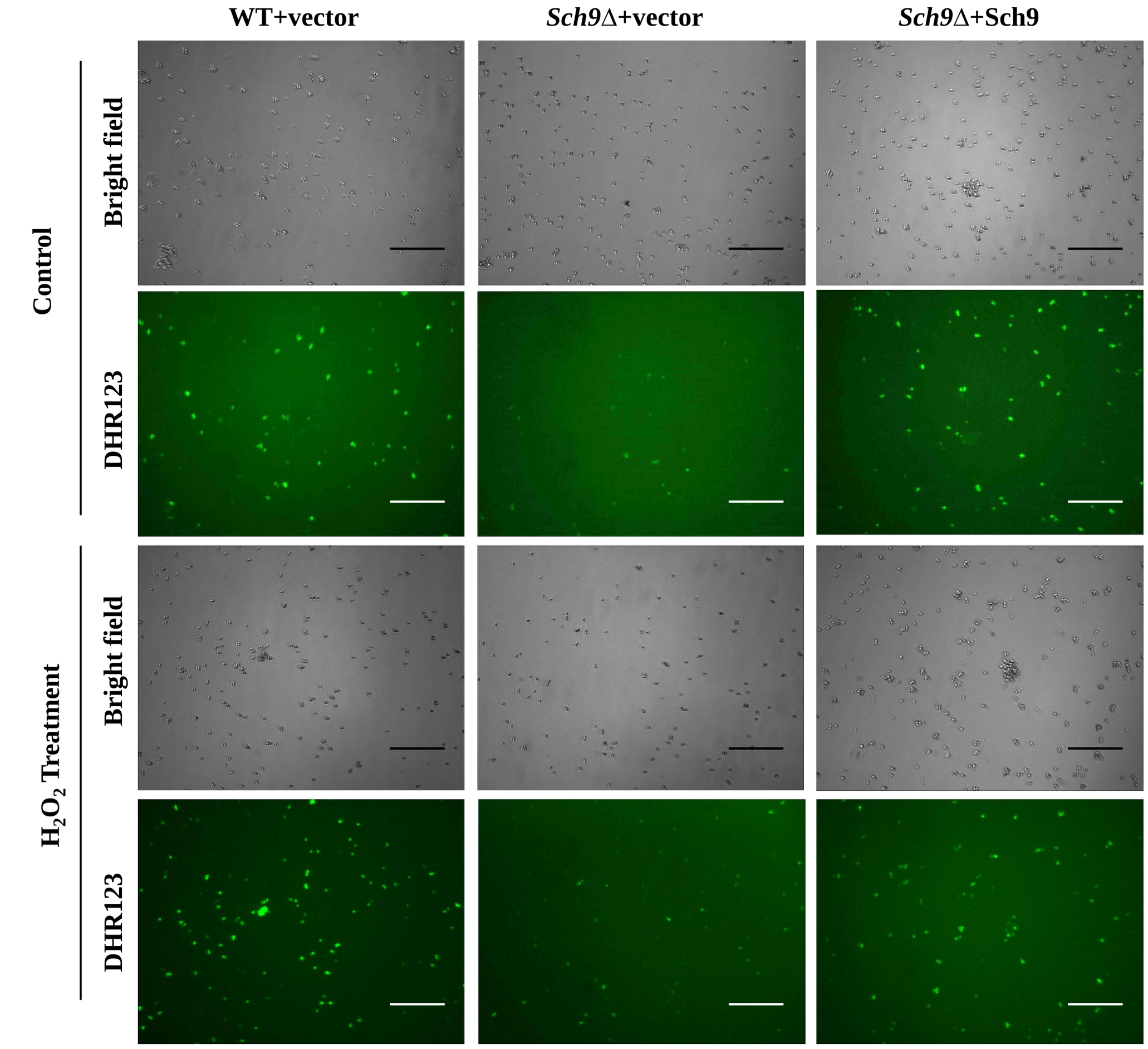


Figure S3. Analysis of intracellular oxidation by DHR123 staining. (A) Microscopy of DHR123 fluorescence on WT (TB50a) cells in log phase transformed with empty vector (WT+vector) and *sch9Δ* (TS120-2d) cells in log phase transformed with empty vector (*sch9Δ*+vector) or pRS416-*SCH9* (*sch9Δ*+Sch9) with or without 1 hour treatment of 0.5mM H_2O_2. Bars: 100 μm. (B) Spectrofluorometer analysis of DHR123-stained cells. (* $P < 0.05$, ** $P < 0.01$)

Figure S4

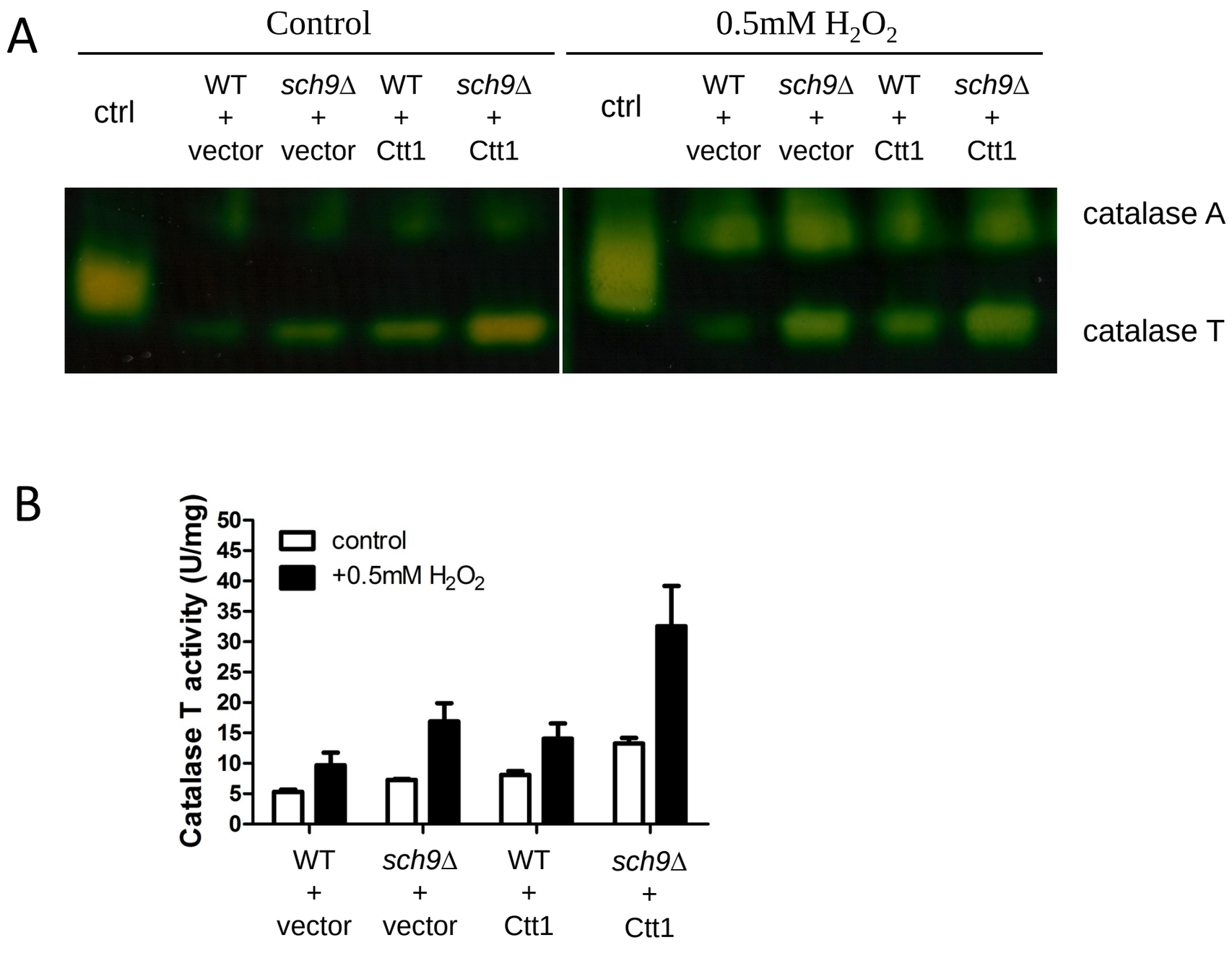
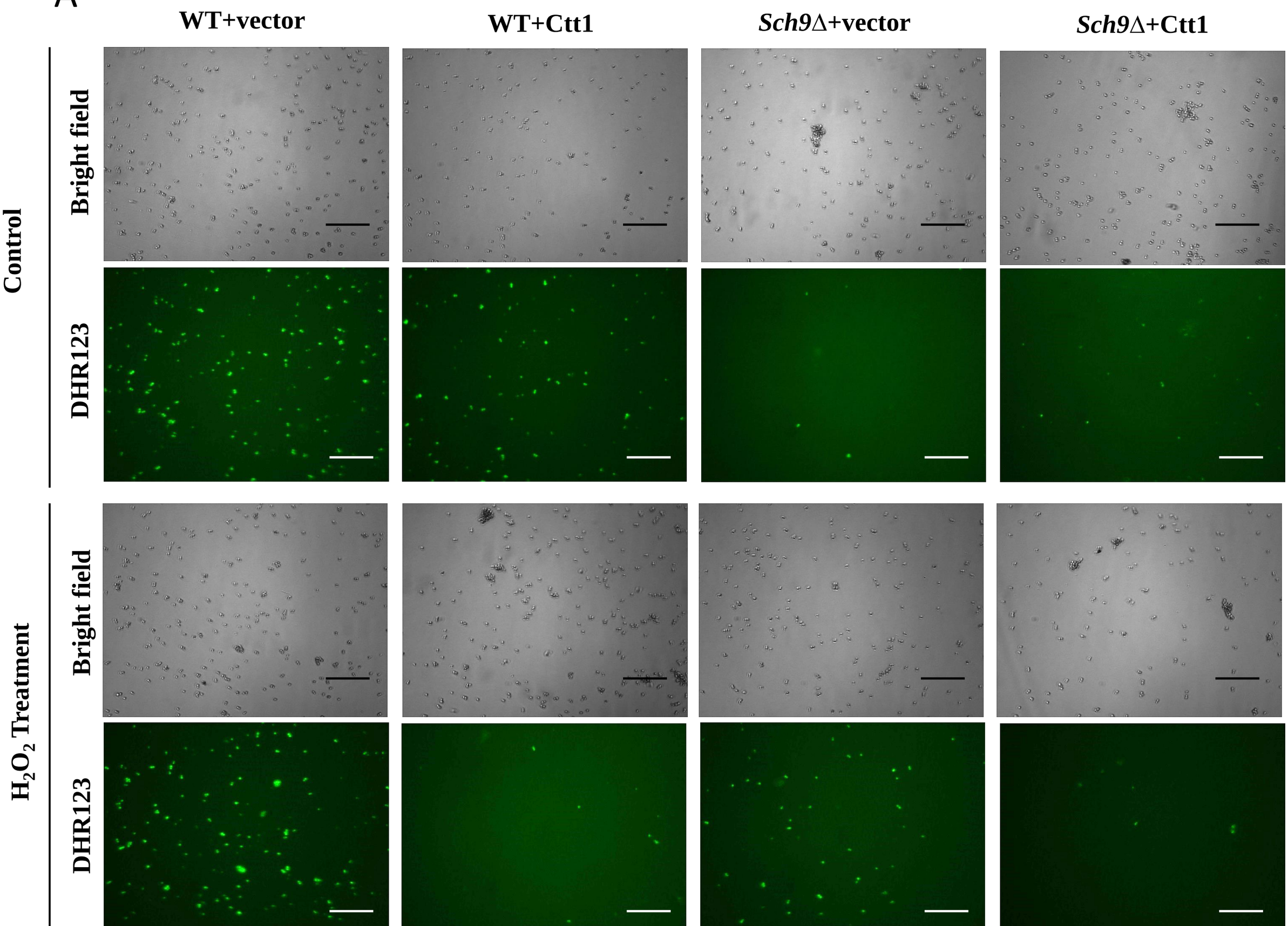


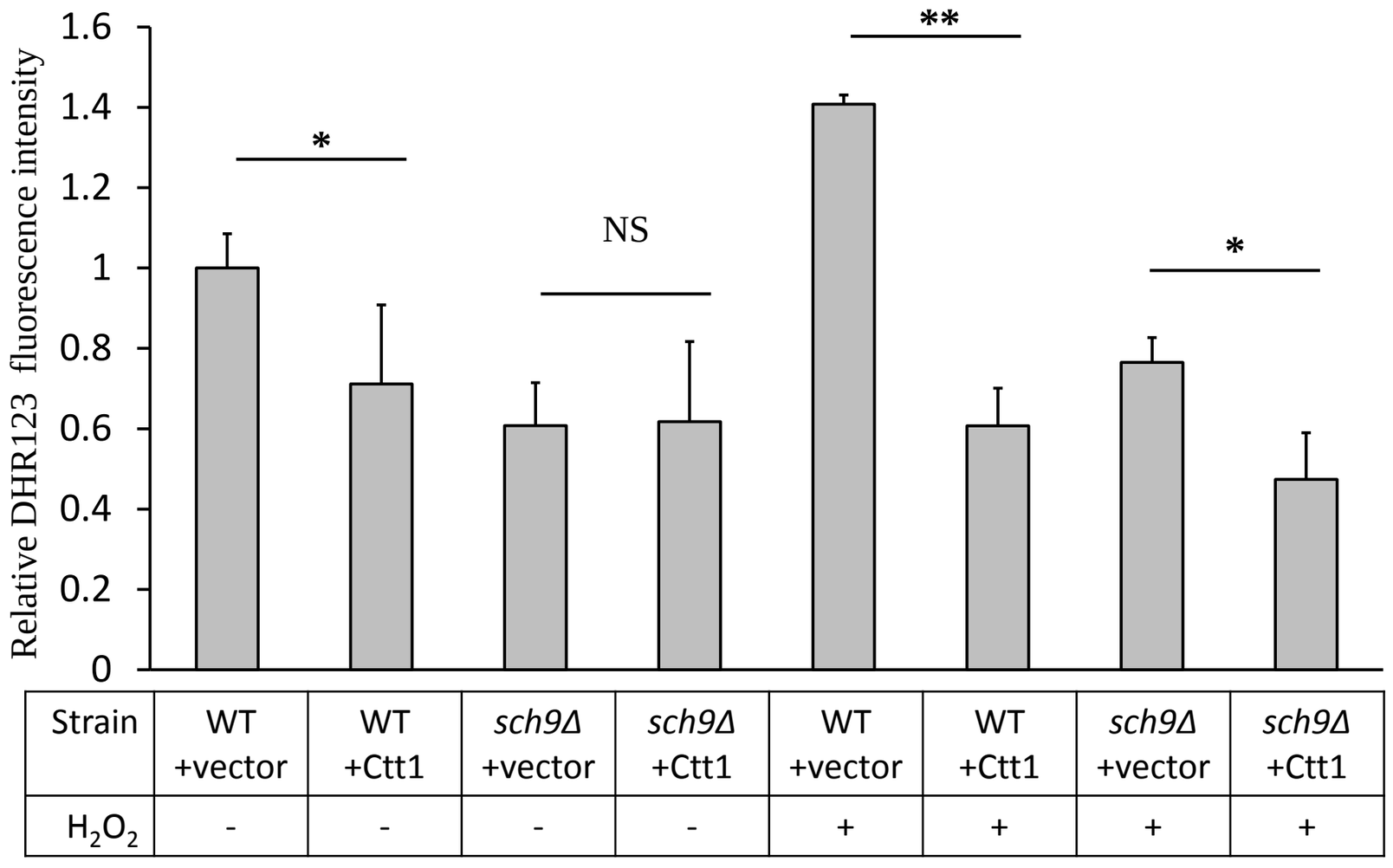
Figure S4. Enhancing catalase activity by the overexpression of Ctt1. (A) Catalase activities were detected by native gel electrophoresis on WT (TB50a) and *sch9Δ* (TS120-2d) cells in log phase transformed with pEGH-*CTT1* or control vector with or without 1 hour treatment of 0.5mM H_2O_2. 10 U of bovine catalase was loaded as control. (B) Quantification of native gel electrophoresis results.

Figure S5

A



B



Strain	WT +vector	WT +Ctt1	*sch9Δ* +vector	*sch9Δ* +Ctt1	WT +vector	WT +Ctt1	*sch9Δ* +vector	*sch9Δ* +Ctt1
H_2O_2	-	-	-	-	+	+	+	+

Figure S5. DHR123 staining analysis of intracellular oxidation on cells with or without Ctt1 overexpression. (A) Microscopy of DHR123 fluorescence on WT (TB50a) and *sch9Δ* (TS120-2d) cells in log phase transformed with pEGH-*CTT1* or control vector with or without 1 hour treatment of 0.5mM H_2O_2. Bars: 100 μm. (B) Spectrofluorometer analysis of DHR123-stained cells. (* $P < 0.05$, **$p < 0.01$, "ns" no significance)