Supplementary Material

1 Supplementary Figures and Tables

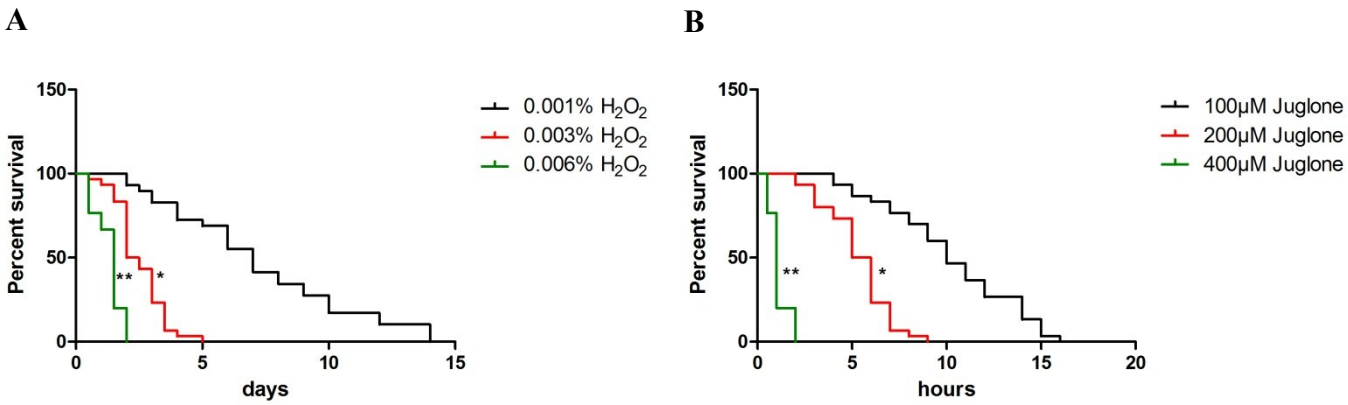
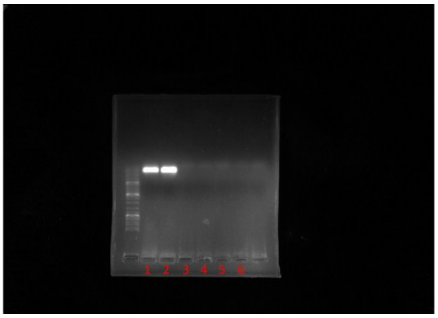
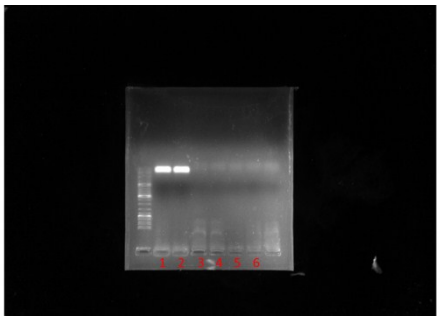


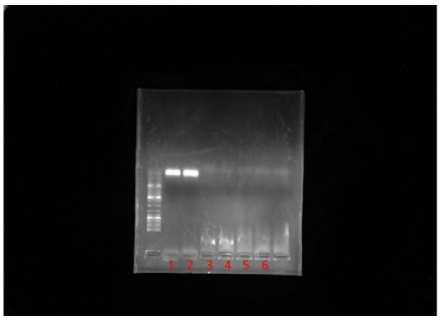
Fig. S1 The differential survival of *C. elegans* under different levels of oxidative stress. (A) The survival of *C. elegans* under 0.001% (v/v) H_2O_2, 0.003% (v/v) H_2O_2 and 0.006% (v/v) H_2O_2 respectively. (B) The survival of *C. elegans* under 100 μM juglone, 200 μM juglone and 400 μM juglone respectively. * Indicates statistically significant differences at $p < 0.01$.



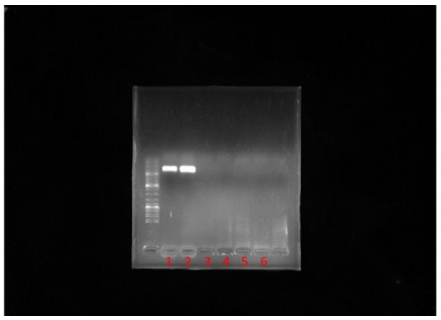
pmk-1



skn-1



sek-1



sod-3

Fig. S2 The validation of primers about antioxidant genes (*pmk-1, skn-1, sek-1 and sod-3*)of *C. elegans.*1. The cDNA templates come from *C. elegans* which fed 427 at a concentration of 10^9 CFU/mL for two days after L4 stage. 2. The cDNA templates come from *C. elegans* which fed X13 at a concentration of 10^9 CFU/mL for two days after L4 stage. 3. The cDNA templates come from *E. coli*. 4. The cDNA templates come from 427. 5. The cDNA templates come from X13. 6. The cDNA templates come from a mixture of *E. coli*, 427 and X13.

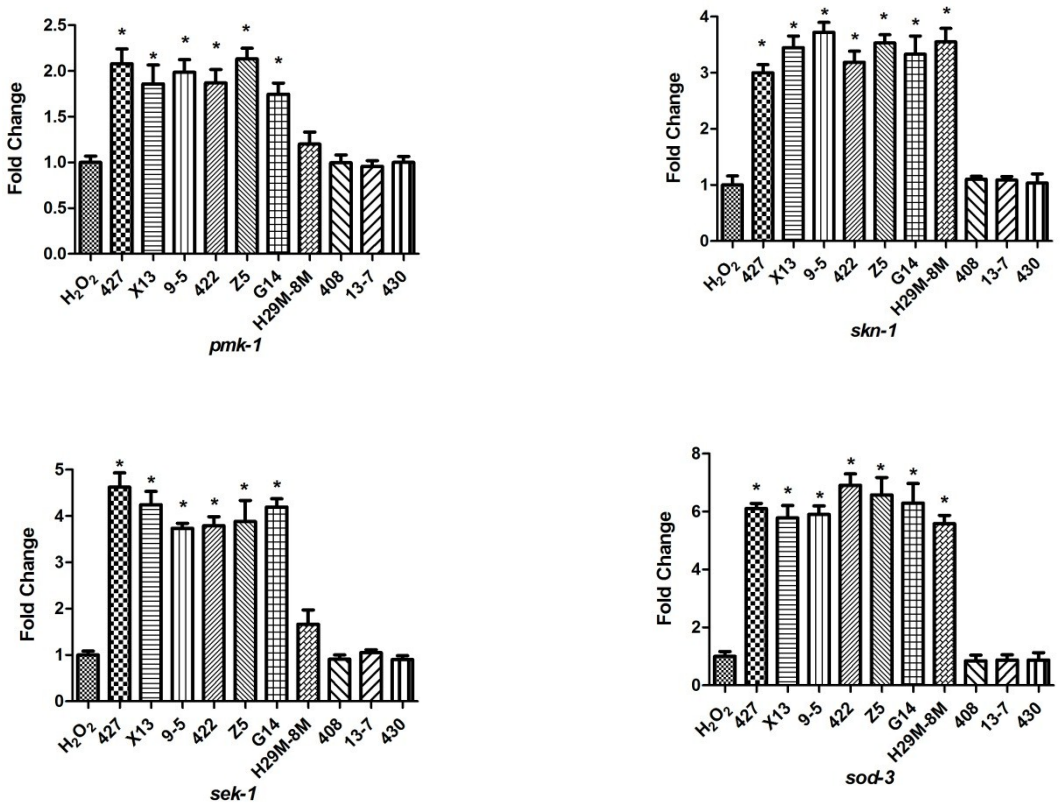


Fig. S3 Differential effects of LAB on the transcription of antioxidant genes of *C. elegans* whose surface were washed repeatedly before exposed to H_2O_2. H_2O_2: treatment with *E. coli* OP50 in the first two days and then exposed to H_2O_2 at the L4 stage of *C. elegans*. LAB: treatment with LAB in the first two days and then exposed to H_2O_2 at the L4 stage of *C. elegans*. * Indicates statistically significant differences at $p < 0.05$.

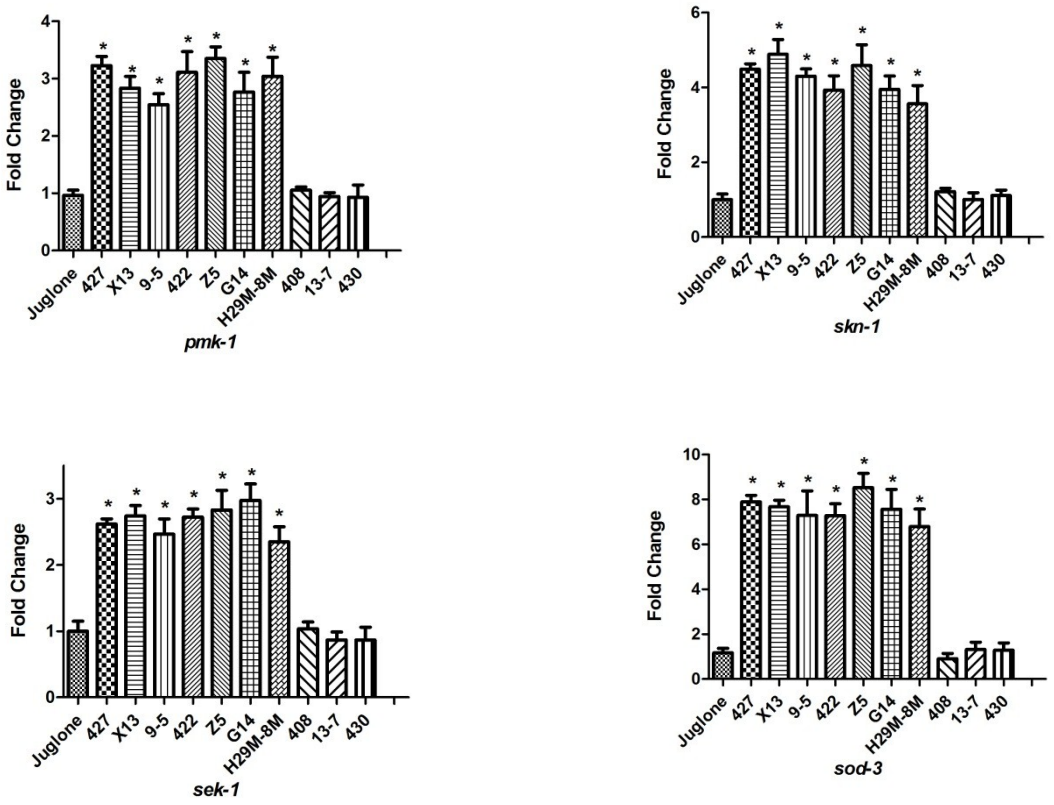


Fig. S4 Differential effects of LAB on the transcription of antioxidant genes of *C. elegans* whose surface were washed repeatedly exposed to juglone. Juglone: treatment with *E. coli* OP50 in the first two days and then exposed to juglone at the L4 stage of *C. elegans*. LAB: treatment with LAB in the first two days and then exposed to juglone at the L4 stage of *C. elegans*. * Indicates statistically significant differences at $p < 0.05$.