

Madia et al., <http://www.jcb.org/cgi/content/full/jcb.200906011/DC1>

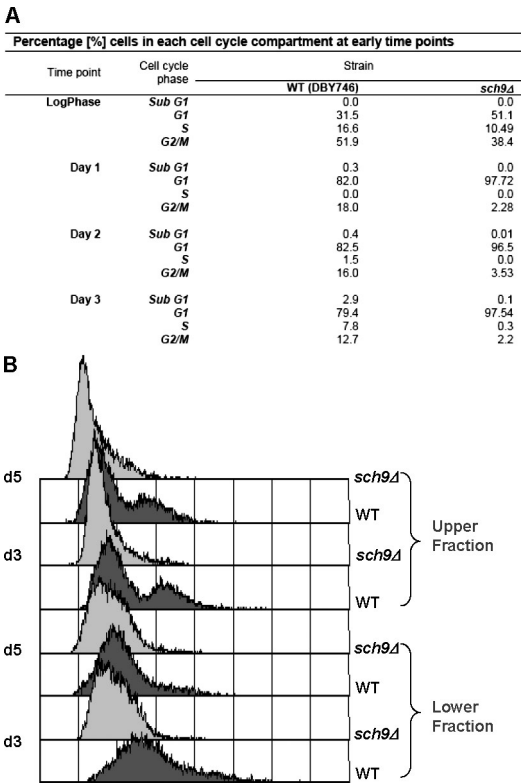


Figure S1. **Cell cycle profiles of wild-type and *sch9Δ* cultures.** (A) Percentage of cells in each cell cycle compartment of chronological aging in wild-type and *sch9Δ* cultures. Data are from FACS analysis measurements presented in Fig. 1 H and calculated using MODFIT (Verity Software House). (B) FACS analysis of cell fractions collected after Percoll density gradient separation of chronological aging in wild-type and *sch9Δ* cultures. Aliquots were collected from upper and lower fraction at the indicated times (day 3 and day 5), and DNA content was measured by flow cytometry. A representative profile is shown.

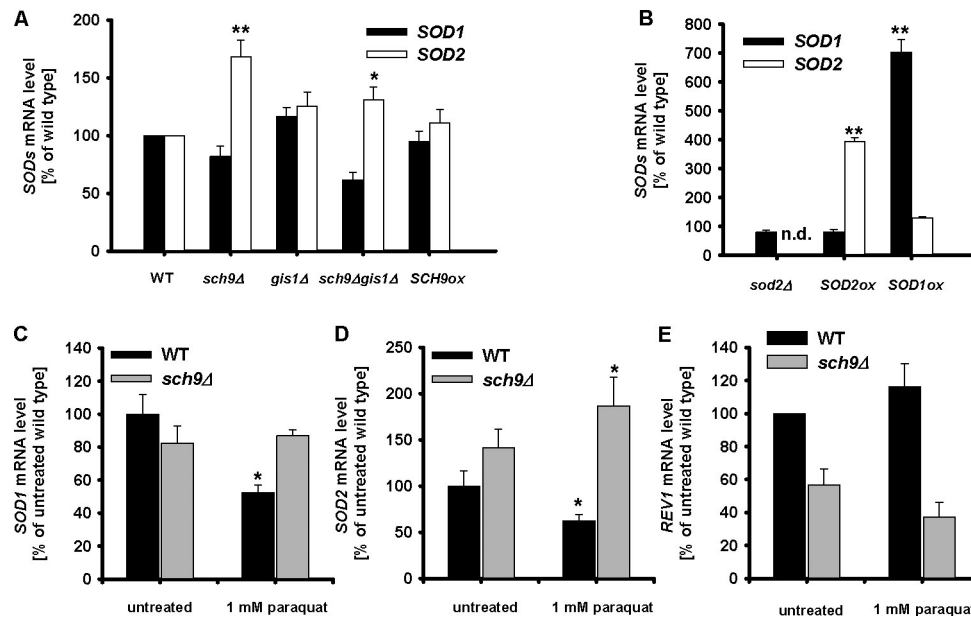


Figure S2. **Dosage of *SODs* and *REV1* transcript levels in 3-d-old yeast cells.** (A) mRNA levels of *SOD1* and *SOD2* in wild-type (WT; DBY746), *sch9Δ*, *gis1Δ*, *gis1Δ sch9Δ*, and *SCH9ox* cells, and (B) control in *sod2Δ*, *SOD1ox*, and *SOD2ox*. (C) mRNA levels of *SOD1*, (D) *SOD2*, and (E) *REV1* in WT (DBY746) and *sch9Δ* cells before and after 48 h of treatment with 1 mM paraquat. mRNA extracted from 3-d-old cells was subjected to quantitative real-time PCR analysis. *, $P < 0.05$; **, $P < 0.01$; mutant versus WT ($n = 6$, ANOVA test, Tukey's test). n.d., non-detectable.

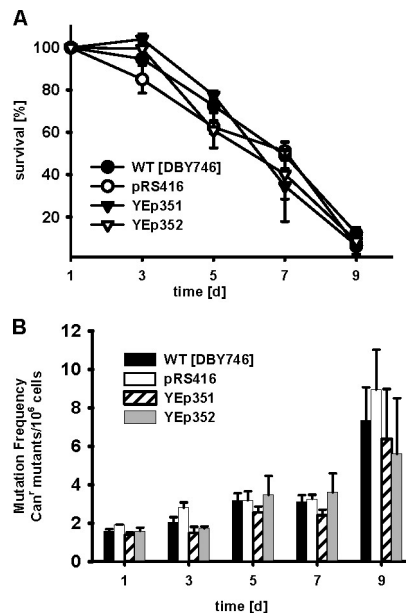


Figure S3. **Life span and age-dependent mutation frequency of plasmid vectors.** (A) Chronological survival and (B) mutation frequency (*Can1*) of the wild type (DBY746) and wild type transformed with either low copy plasmid vector pRS416 or multicopy vectors YEp352 and YEp351. Data represent the mean of two experiments in duplicate.

Table S1. **Percentage of early regrowth (days 7–17)**

| Background | Strains | |
|---------------|-----------|--------------|
| | WT | <i>Sch9Δ</i> |
| | % | % |
| <i>DBY746</i> | 12.5 (14) | 0.0 (12) |
| <i>BY4741</i> | 16.7 (6) | 0.0 (6) |
| <i>SP1</i> | 66.7 (3) | 0.0 (3) |

Numbers in parentheses indicate *n* (number of experiments).