

## **Supplemental Material to:**

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**Autophagy is required for  $G_1/G_0$  quiescence in response to  
nitrogen starvation in *Saccharomyces cerevisiae***

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Figure S1

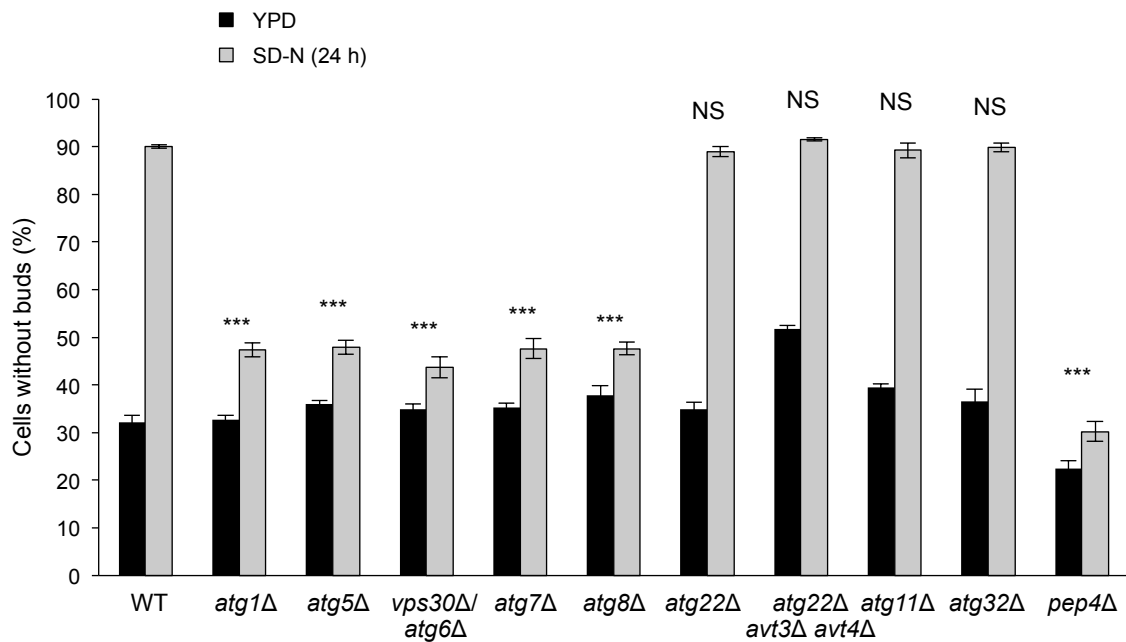


Figure S2

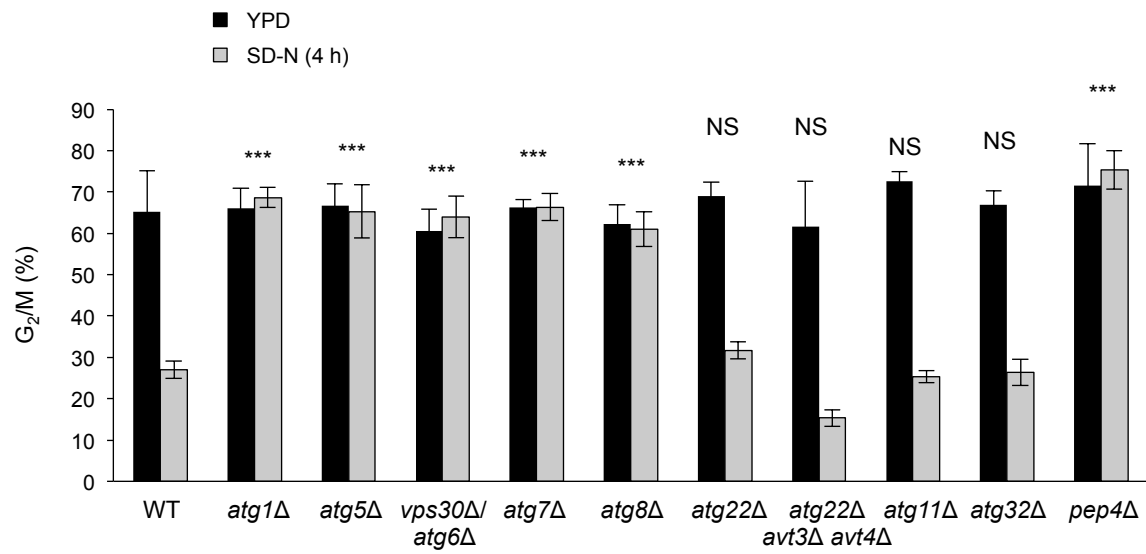
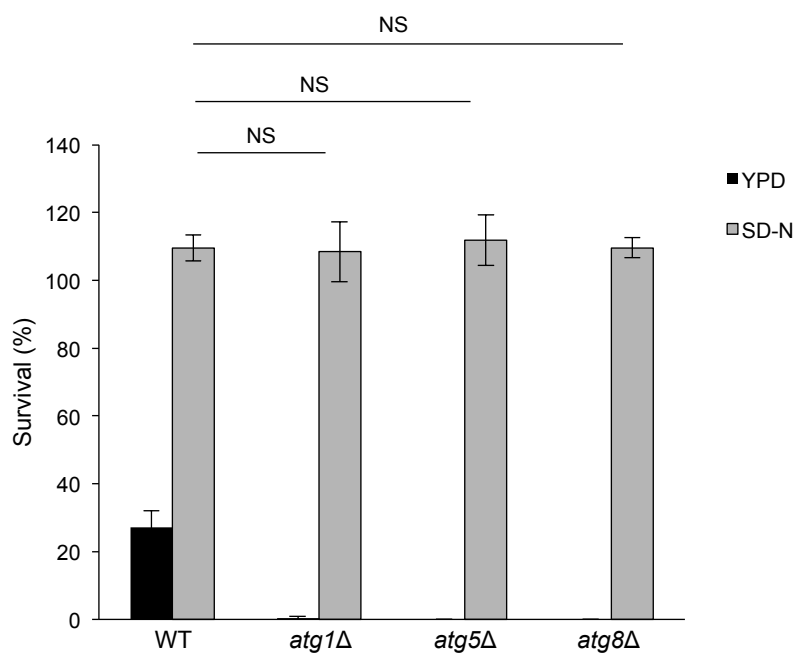


Figure S3



**Figure S1.** Cell cycle analysis of wild-type and autophagy-deficient yeasts during nitrogen starvation. Quantification of the percentage of wild-type and indicated *atg* mutant yeast strains without buds at time 0 (YPD) or after 24 h in SD-N (SD-N). Bars represent mean  $\pm$  SEM of triplicate samples (at least 100 cells per sample were counted). Similar results were observed in more than 3 independent experiments. \*\*\* $P < 0.001$ , NS, not significant; 2-way ANOVA with Bonferroni correction for comparison of magnitude of change between YPD and SD-N in the indicated *atg* mutant yeast strain compared to the magnitude of change between YPD and SD-N in wild-type (WT) yeasts.

**Figure S2.** Quantification of wild-type and autophagy-deficient yeasts in G<sub>2</sub>/M (2N DNA content) during nitrogen starvation. Flow cytometry data from experiments performed in Figure 1B were fitted to the Dean-Jet-Fox model. Values represent the mean  $\pm$  SEM percentage of cells with 2N DNA content (i.e., in G<sub>2</sub>/M) of 3 independent experiments. \*\*\*  $P < 0.001$ , NS, not significant; 2-way ANOVA with Bonferroni correction for comparison of magnitude of change between YPD and SD-N in the indicated *atg* mutant strain compared to the magnitude of change between YPD and SD-N in wild-type (WT) yeasts.

**Figure S3.** Heat-shock resistance of *atg1* $\Delta$ , *atg5* $\Delta$ , and *atg8* $\Delta$  strains. Assessment of heat-shock resistance in indicated yeast strains during growth in YPD or after shifting to SD-N for 4 h. Bars represent mean  $\pm$  SEM of triplicate samples. Similar results were observed in 3 independent experiments. NS, not significant; one-way ANOVA with Tukey test for multiple comparisons.