

FIG S1 The toxicity of straight-chain alcohols is correlated with their lipophilicity. Aliquots (3 μ l) of 10-fold serial dilutions of the BY4742 strain were spotted onto freshly prepared YPD plates containing the indicated concentrations of methanol, ethanol, 1-propanol, and 1-butanol, and incubated at 30 °C for 3 days.

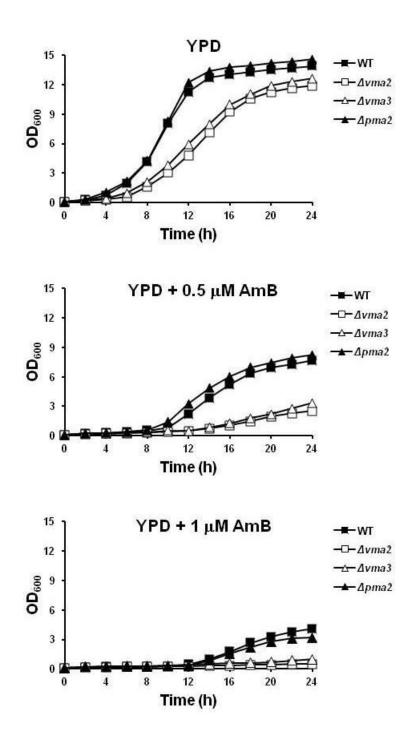


FIG S2 V-ATPase is important for tolerance to AmB. The wild-type, $\triangle vma2$, $\triangle vma3$, and $\triangle pma2$ cells grown to log phase in YPD broth were inoculated into YPD media containing 0, 0.5, and 1 μ M AmB, and incubated with shaking at 30 °C for 24 h. Growth was examined by monitoring OD₆₀₀ at the indicated times.

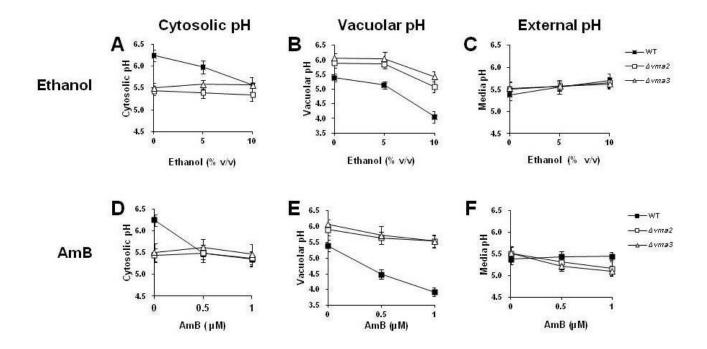


FIG S3 The effects of long-term exposure to straight-chain alcohols and AmB on cytosolic, vacuolar, and external pH in the mutants lacking V-ATPase. Cytosolic, vacuolar, and external pH of the wild-type (BY 4742) (\blacksquare), $\triangle vma2$ (\square), and $\triangle vma3$ (\triangle) cells incubated in YPD media containing 0, 5, and 10% ethanol (A–C) and 0, 0.5, and 1 μ M AmB (D–F) at 30 °C for 12 h were measured. The log-phase cells transformed with pYES- P_{ACTI} -pHluorin were used for the measurement of cytosolic pH (A and D), whereas the log-phase cells without the plasmid were used for the measurement of vacuolar pH (B and E) and external pH (C and F). Error bars indicate \pm S.D.