

Expanded View Figures

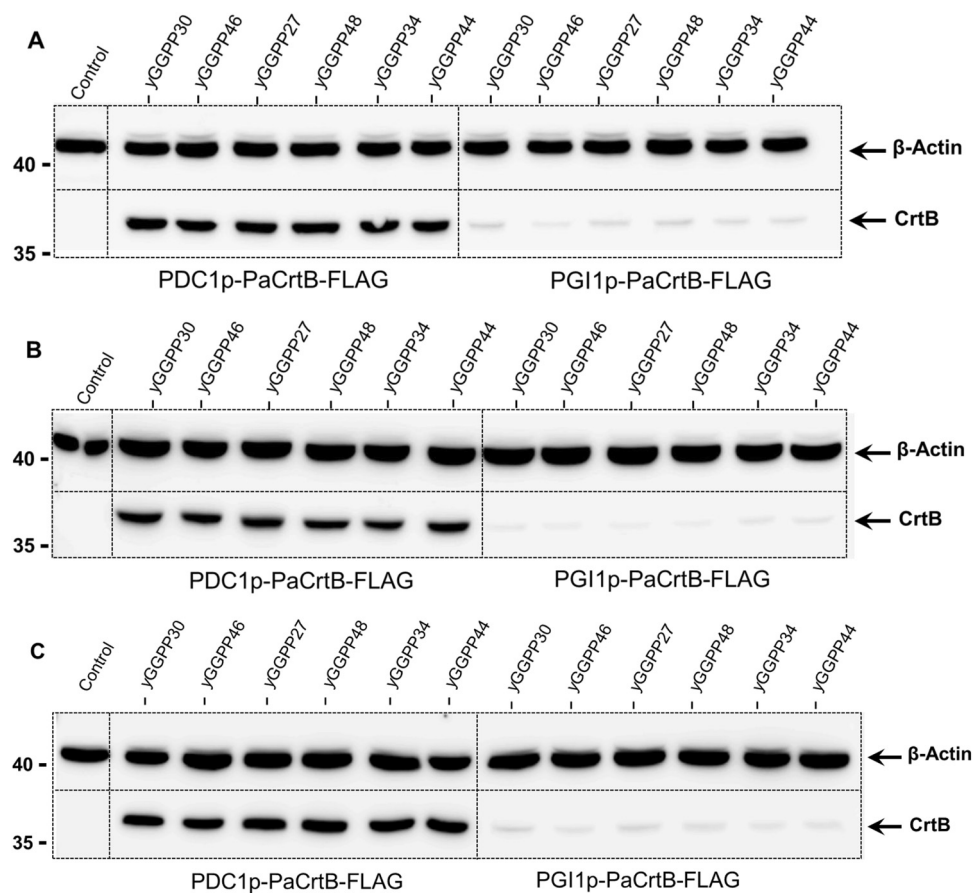


Figure EV1. Expression of PaCrtB-FLAG in the different strains.

PaCrtB-FLAG expression determined by western blot in yeast strains with different GGPP concentrations (panels (A-C) correspond to three different biological replicates).

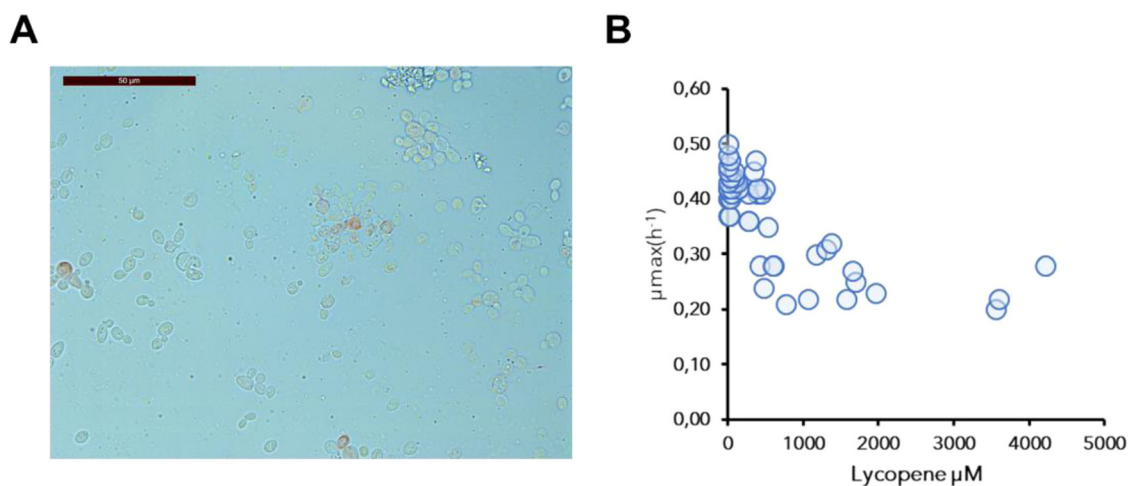


Figure EV2. Lycopene production in *S. cerevisiae*.

(A) *S. cerevisiae* yGGPP34 strain expressing PDC1p-PaCrtB and TDH3p-BtCrtI. Bright field images were acquired using the camera LEICA DFC300FX mounted in the microscope Leica DM4000B with Leica EL6000 light source. Lycopene crystals are observed in red. (B) Decrease of specific growth rate in yeast strains expressing BtCrtI with different phytoene concentrations.

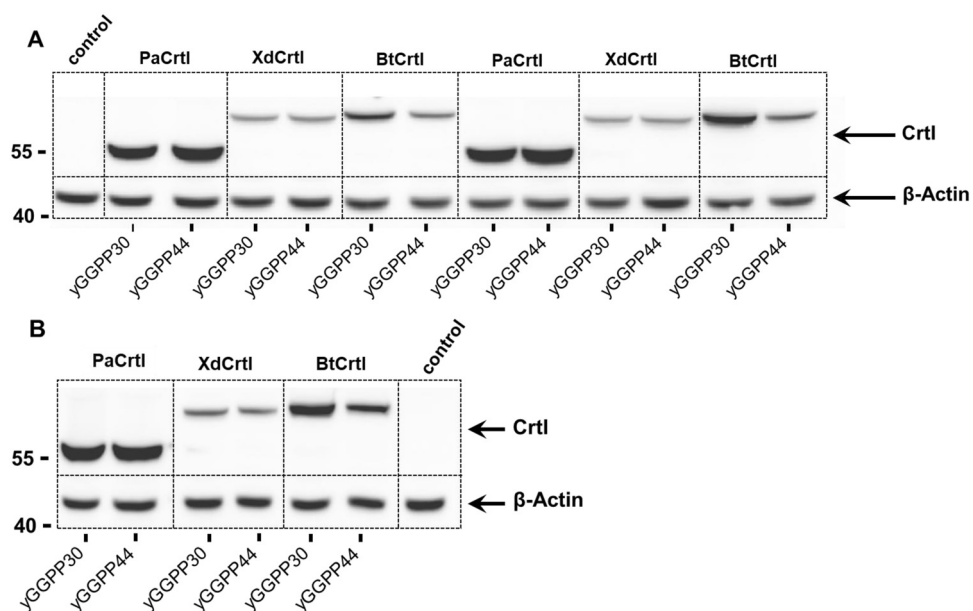


Figure EV3. Expression of Crtl in the different strains.

Expression of the three studied Crtl-V5 proteins in strains with low (yGGPP030) and high (yGGPP044) phytoene content (panels (A and B) correspond to three different biological replicates).

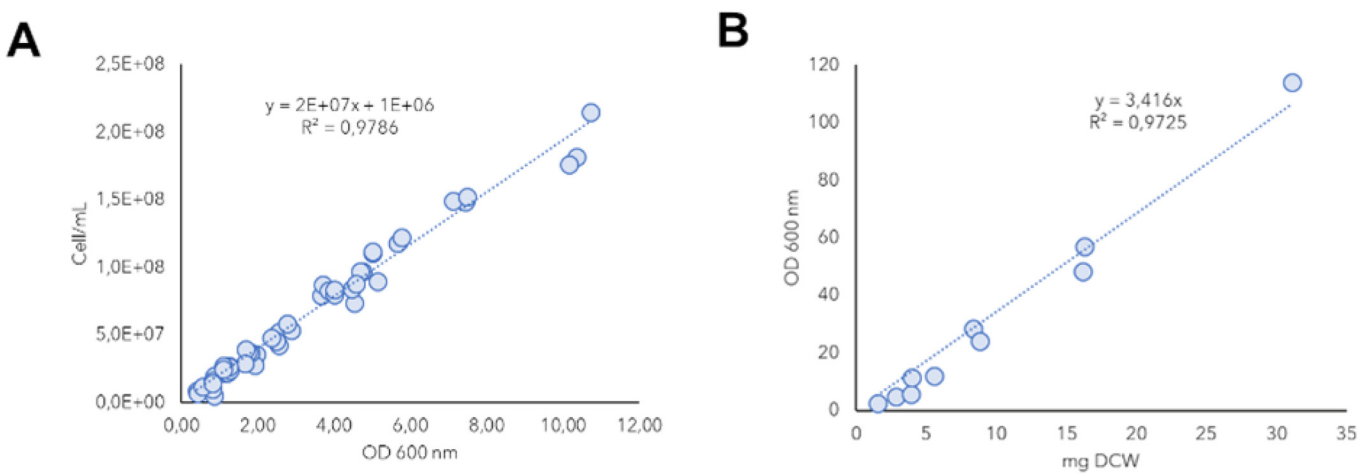


Figure EV4. Correlations between OD and biomass concentration.
Correlation between cell/mL and OD_{600nm} (A) and between OD_{600nm} and mg DCW (B).