

S1 Fig. Expression constructs and assessment of extracellular BGL secretion.

A, Maps of the two BGL expression cassettes bearing zeocin (*ZeoR*) and geneticin (*KanR*) resistance markers. Also shown is the position and orientation of the cloned *T. aurantiacus* β -glucosidase (*BGL*) gene. α -F, *S. cerevisiae* alpha-factor secretion signal. **B**, UV imaging for qualitative assessment of extracellular BGL secretion in transformed clones of CBS7435, Pp2 and Pp4 using 4-MUG assays in 24-well microtitre plates. UV fluorescence occurs due to BGL hydrolysis of 4-methylumbelliferyl- β -D-glucuronide (4-MUG) to 4-methylumbelliferone.

C, Line graphs showing quantitative timepoint assessment of BGL secretion in transformed clones of CBS7435, Pp2 and Pp4 using 4-NPG assays (3 ml cultures incubated for 96 h). Optical absorbance at 405 nm occurs due to BGL hydrolysis of 4-nitrophenyl-β-D-glucopyranoside (4-NPG) to 4-nitrophenol (4-NP). Clones selected for use as parents in genetic crosses are marked with black rectangles. Numerical data are listed in S1 Data.