

Table S1 Strains and plasmids used in this study

Strains	Genotype and description	Reference
<i>Escherichia coli</i>		
<i>E. coli</i> JM109	<i>recA1, endA1, gyrA96, thi-1, hsdR17, supE44, relA1, Δ(lac-proAB)/F' [traD36, proAB⁺, lacIq, lacIq lacZΔM15]</i>	Lab storage
<i>S. cerevisiae</i>		
BY00	Wild <i>Saccharomyces cerevisiae</i> BY4741 (MATa <i>his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>)	[38]
BY01	BY00 <i>BNA2Δ::T_{ADHI}-P_{GALI}-P_{GALI}-T_{CYCI}</i>	This study
BY00-Con	BY00 containing plasmid pYES2.0	This study
BY01-Con	BY01 containing plasmid pYES2.0	This study
BY00- <i>phzD</i>	BY00 containing plasmid pYE- <i>P_{TEFI}-phzD</i>	This study
BY00- <i>phzE</i>	BY00 containing plasmid pYE- <i>P_{TEFI}-phzE</i>	This study
BY00- <i>dhbX</i>	BY00 containing plasmid pYE- <i>P_{TEFI}-dhbX</i>	This study
BY01-C3N	BY01 containing plasmid pY-C3N	This study
BY00-C3N	BY00 containing plasmid pY-C3N	This study
Plasmids		
pYES2.0	2μ, Shuttle vector of <i>Escherichia coli</i> and <i>Saccharomyces cerevisiae</i> , Amp ^R , <i>URA3</i> marker	Lab storage
pYE2.0- <i>phzD</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{GALI}-phzD-T_{CYCI}</i>	This study
pYE2.0- <i>phzE</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{GALI}-phzE-T_{CYCI}</i>	This study
pYE2.0- <i>dhbX</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{GALI}-dhbX-T_{CYCI}</i>	This study
pYE- <i>P_{TEFI}-phzD</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{TEFI}-phzD-T_{CYCI}</i>	This study
pYE- <i>P_{TEFI}-phzE</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{TEFI}-phzE-T_{CYCI}</i>	This study
pYE- <i>P_{TEFI}-dhbX</i>	2μ plasmid, <i>URA3</i> marker, <i>P_{TEFI}-dhbX-T_{CYCI}</i>	This study
pY-C3N	2μ plasmid, <i>URA3</i> marker, including module <i>P_{TEFI}-phzE-T_{CYCI}</i> ; <i>P_{PGK1}-phzD-T_{TDHI}</i> ; <i>P_{TEFI}-dhbX-T_{CYCI}</i>	This study
pUMRI-21 (A)	Plasmid containing loxP- <i>kanMX-URA3</i> -loxP deletion cassette, Kan ^R , pBR322 ori	[39]
pRU-BNA-UD	pUMRI-21 (A) containing the loxP- <i>kanMX-URA3</i> -loxP deletion cassette flanked by 500 bp of up and down fragment to inactivate gene <i>BNA2</i>	This study

Amp^R: ampicillin resistance; Kan^R: kanamycin resistance