

**Table S1. Primers used in this work**

**For plasmids assembly utilizing yeast recombinational cloning.**

Name	Sequence (5'-3')	Length (bp)		Description
13	AGCGGATAACAATTTACACAGGAA ACAGCTAGGCGCATGCAACTTCTTT	50	FW	<i>YRP-L-P<sub>ADH1</sub></i>
oL3148	GGTAACGCCAGGGTTTTCCCAGTCA CGACGCCGGTAGAGGTGTGGTCAAT	50	RV	<i>ADH2<sub>ter</sub>-YRP-R</i>
19	AGCGGATAACAATTTACACAGGAA ACAGCATCGATGAATTCGAGCTCGT	50	FW	<i>YRP-L-KanMxRV</i>
20	CGGGTTAATTAAGGCGCGCC	20	RV	<i>KanMxRV</i>
21	AAACAGATCTGGCGCGCCTTAATTA ACCCGACTAGTACGGATTAGAAGCC	50	FW	<i>KanMxRV-P<sub>GAL1</sub></i>
oL3026	aaacagatctggcgcgccttaatta accgcggaggacagtactccgctc	50	FW	<i>KanMxRV-P<sub>5XGAL1</sub></i>
oL3080	GCCCTTCTTAATGTTCTTAGCATCG GCCATGGTAAGCTTAATATCCCTA	50	RV	<i>Luc-P<sub>GAL1</sub></i>
oL3079	CGACTCACTATAGGGAATTAAGC TTACCATGGCCGATGCTAAGAACAT	50	FW	<i>P<sub>GAL1</sub>-Luc</i>
oL3081	GGTAACGCCAGGGTTTTCCCAGTCA CGACGTGGATCCTTGCAAATTAAG	50	RV	<i>CYC1<sub>ter</sub>-YRP-R</i>
22	GGTAACGCCAGGGTTTTCCCAGTCA CGACGGGTAAGCTTAATATCCCTA	50	RV	<i>P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)-YRP-R</i>
oL3150	AGCGGATAACAATTTACACAGGAA ACAGCATTTCAAAGAATACGTAAT	50	FW	<i>YRP-L-P<sub>TDH3</sub></i>
oL3151	CATGTTATCCTCCTCGCCCTTGCTC ACCATTTTGTGTTTATGTGTGTT	50	RV	<i>mCherry-P<sub>TDH3</sub></i>
oL3152	GTTTCGAATAAACACACATAAAACA ACAAAATGGTGAGCAAGGGCGAGGA	50	FW	<i>P<sub>TDH3</sub>-mCherry</i>
oL3153	GAATGTAAGCGTGACATAACTAATT ACATGCTACTTGTACAGCTCGTCCA	50	RV	<i>CYC1<sub>ter</sub>-mCherry</i>
oL3154	ACCGGCGGCATGGACGAGCTGTACA AGTAGCATGTAATTAGTTATGTCAC	50	FW	<i>mCherry-CYC1<sub>ter</sub></i>
oL3266	TTTTGGGACGCTCGAAGGCTTTTAA TTTGcgggtaattaaggcgcgcc	50	FW	<i>CYC1<sub>ter</sub>-HphMx</i>
oL3267	aaacagatctggcgcgccttaatta accgcGCAAATTAAGCCTTCGAG	50	RV	<i>HphMx-CYC1<sub>ter</sub></i>
oL2562	gGTAACGCCAGGGTTTTCCCAGTCA CGACGatcgatgaattcgagctcgt	50	RV	<i>HphMx-YRP-R</i>

**Primers used for promoter swapping**

Name	Sequence (5'-3')	Length (bp)		Description
oL3024	ctcttttcctaataaggtggagct tttggctccagtatgctttcacgg atcgatgaattcgagctcgt	70	FW	<i>P<sub>FLO1Δ</sub>::KanMxRV-P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)</i>
oL3025	gccagaagtgtaaagactgcaaaa acatatagcgatgaggcattgtcat ggtaagcctaataattcccta	70	RV	<i>P<sub>FLO1Δ</sub>::KanMxRV-P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)</i>
oL3055	ATTCTCATCGAGAGCCGAGCCATAC ACCTAAGGTGGACAGAAAGCTAAAA ATCGATGAATTCGAGCTCGT	70	FW	<i>P<sub>FLO11Δ</sub>::KanMxRV-P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)</i>
oL3056	TAAATAGAAGCGAAAGGACCAAT AAGCGAGTAGAAATGGTCTTTGCAT	70	RV	<i>P<sub>FLO11Δ</sub>::KanMxRV-P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)</i>

	GGTAAGCTTAATATTCCCTA			
oL3233	CTTCACTCTTGACGCCAGTTGAGTG AGGGACTGAATACTATATACAGTAA ATCGATGAATTCGAGCTCGT	70	FW	$P_{TUP1\Delta}::KanMxRV-$ $P_{GAL1}(P_{5XGAL1})$
oL3261	TCGAGAAGCTCATTGAGCTTATTCT GCGTATTCGAAACGCTGGCAGTCATgg taagcttaatattcccta	70	RV	$P_{TUP1\Delta}::KanMxRV-$ $P_{GAL1}(P_{5XGAL1})$

#### Primers used promoter-swapping confirmations.

Name	Sequence (5'-3')	Length (bp)		Description
oL2789	ttggaacgatgaggaacc	20	FW	Upstream <i>FLO1</i>
oL3050	ACTTTTCCTCTGGCCTGCTG	20	RV	Internal <i>FLO1</i>
oL3163	TACCGTCGTTTTGGGGTTCC	20	FW	Upstream <i>FLO11</i>
oL3071	TTGGGACAGCCATTAACGAT	20	RV	Internal <i>FLO11</i>
oL3262	GCGGAATCGATCTGTTGTTT	20	FW	Upstream <i>TUP1</i>
oL3263	CTTCTTCGTACGCGTCCTTC	20	RV	Internal <i>TUP1</i>
21	AAACAGATCTGGCGCGCCTTAATTA ACCCGACTAGTACGGATTAGAAGCC	50	FW	$KanMxRV-$ $P_{GAL1}$
oL3026	aaacagatctggcgcgcctaatta accgcggaggacagtactccgctc	50	FW	$KanMxRV-$ $P_{5XGAL1}$
oL2091	CATCCTATGGAAGTGCCTCGG	21	FW	Internal <i>KanMx</i>

#### Primers used for gene deletion and reporter gene integration in the genome.

Name	Sequence (5'-3')	Length (bp)		Description
oL2787	Ctcttttctaataaggtggagct ttggctccagatgcttcacgg cggcatcagagcagattgtactg	73	FW	<i>flo1Δ::URA3</i>
oL2806	Tactcgaaaacatcctaagcgaacc acactagatcttagcttagtactgc ggtatttcacaccgcataggg	71	RV	<i>flo1Δ::URA3</i>
oL3072	TGCGGTATCTTCACGGACAGAACTT CTATTGCCTATCGGTGGTGTGATTA cggcatcagagcagattgtactg	73	FW	<i>flo11Δ::URA3</i>
oL3073	CGAAGATTATTAGTTGTGCCAAGGC AATATCAGGTTTATTAATCTTTTAG ggtatttcacaccgcataggg	71	RV	<i>flo11Δ::URA3</i>
oL2120	CCAGCGTATACAATCTCGATAGTTG GTTCCCGTTCTTTCCACTCCCCTC CGGGTTAATTAAGGCGCGCC	70	FW	<i>gal80Δ::HphMx</i>
oL2121	GTTTTTATAACGTTTCGCTGCACTGG GGGCAAGCACAGGGCAAGATGCTT ATCGATGAATTCGAGCTCGT	70	RV	<i>gal80Δ::HphMx</i>
oL2122	ATGCACAGTTGAAGTGAAGTTGCGG GGTTTTTCAGTATCTACGATTGATT CGGGTTAATTAAGGCGCGCC	70	FW	<i>gal4Δ::NatMx</i>
oL2123	AATGCACGCCATCATTTTAAGAGAG GACAGAGAAGCAAGCCTCCTGAAAG	70	RV	<i>gal4Δ::NatMx</i>

oL3082	ATCGATGAATTCGAGCTCGT AGGAGTGCAAAAAGAGAAAATAAAA GTAAAAAGGTAGGGCAACACATAGT atcgatgaattcgagctcgt	70	FW	<i>gal3Δ::KanMxRV- P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)-Luc</i>
oL3083	TATGAGTAAACTTTTAATATTTAAA GGTTGTTCCAAGAAGGTGTTTAGTG TGGATCCTTGCAAATTAAG	70	RV	<i>gal3Δ::KanMxRV- P<sub>GAL1</sub>(P<sub>5XGAL1</sub>)-Luc</i>

**Primers used for confirmation of gene deletions and genome integration.**

Name	Sequence (5'-3')	Length (bp)		Description
oL2789	ttgtaacgatgaggaacc	20	FW	Upstream <i>FLO1</i>
oL2289	CCTCTAGGTTCTTTGTTACTTCT	24	RV	Internal <i>URA3</i>
oL2807	tcacctgcttgaatcgttg	20	RV	Upstream <i>FLO1</i>
oL2288	CCTTTTGATGTTAGCAGAATTGTC	24	FW	Internal <i>URA3</i>
oL2099	GAGACAGCATTGCGCCAGTA	20	FW	Upstream <i>GAL4</i>
oL2163	GATTCGTCGTCGATTGTC	20	RV	Internal <i>NatMx</i>
4	AGGTTACATGGCCAAGATTGA	21	RV	Upstream <i>GAL4</i>
oL2164	AGGTCACCAACGTCAACGCA	20	FW	Internal <i>NatMx</i>
oL2096	TCTTCATTTACCGGCGCACT	20	FW	Upstream <i>GAL80</i>
oL2094	CGGCGGGAGATGCAATAGG	19	RV	Internal <i>HphMx</i>
oL2097	CGCTGCTGCAAAGTTTTGAC	20	RV	Upstream <i>GAL80</i>
oL2095	TCGCCCCGAGAAGCGCGGCC	20	FW	Internal <i>HphMx</i>
oL3078	CAGTCCGAGCGTTTAGAAGG	20	FW	Upstream <i>FLO11</i>
oL3089	ATGAAATCGCCATGCCAAGC	20	FW	Upstream <i>GAL3</i>
oL2091	CATCCTATGGAAGTGCCTCGG	21	FW	Internal <i>KanMx</i>
oL3127	GTGCGGAGCCACTCTGACTC	20	RV	Upstream <i>GAL3</i>
oL1734	GGCCGGCCGCTTCGAGCAGACATGA TAAGAtcatgtaattagttatgtca	50	FW	<i>CYC1<sub>ter</sub>-Luc</i>

**Primers used for real time PCR (qPCR).**

Name	Sequence (5'-3')	Length (bp)		Description
oL3682	GGGTTTTCGTTCTGTGATCT	20	FW	<i>HEM2</i> <i>housekeeping</i>
oL3683	TTGAATGACTGGCCCTGCAG	20	RV	<i>HEM2</i> <i>housekeeping</i>
oL3692	GGATCAGGTCTTCCGTAGCG	20	FW	<i>TAF10</i> <i>housekeeping</i>
oL3693	TGAAATCTGCTGCACGCCA	19	RV	<i>TAF10</i> <i>housekeeping</i>

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oL3321	TGCCGTCACAGATAGATTGG	20	RV	<i>GAL4-BD</i>
oL3322	CTCTTCCGATGATGATGTCG	20	FW	<i>GAL4-BD</i>

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