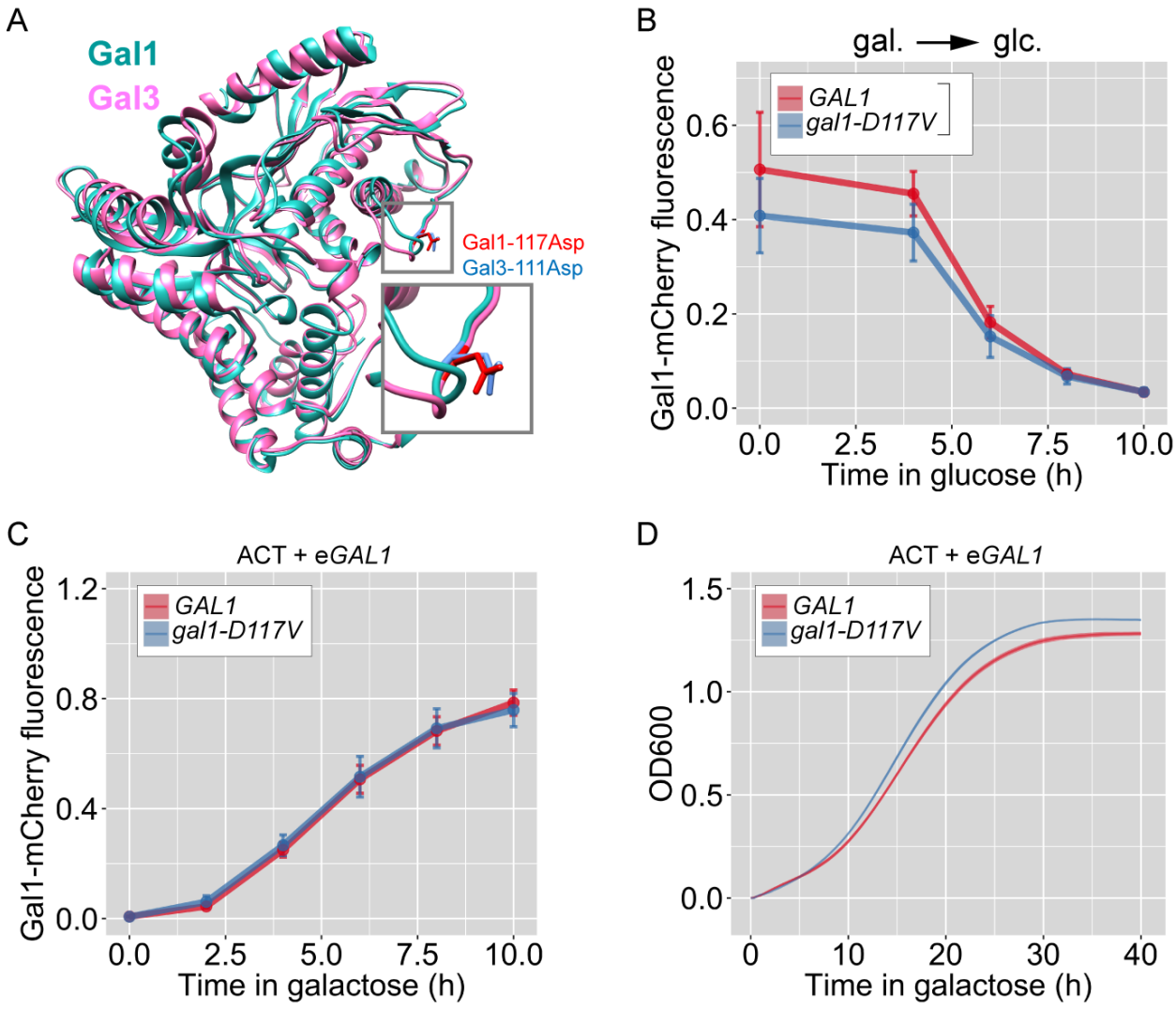

Figure S1. Characterization of the *gal1-D117V* mutant. Related to Figure 2. A. Structural superposition of the Gal1 (blue) and Gal3 (pink) crystal structures. Inset: Gal1-117Asp and the structurally equivalent Gal3-111Asp. **B.** Wild-type and *gal1-D117V* strains were shifted from galactose to glucose and Gal1-mCherry fluorescence, normalized to CFP, was measured over time. **C** and **D**. Expression of Gal1-mCherry relative to CFP (**C**) and OD_{600} (**D**) over time upon shift from glucose to galactose in wild-type and *gal1-D117V* mutants containing ectopically expressed *GAL1* (*eGAL1*). Error bars represent the SEM from ≥ 3 biological replicates, depicted as bars (**B** and **C**) or envelope (**D**). The yeast strains and the number of biological replicates for all experiments are listed in Table S1 and S2, respectively.

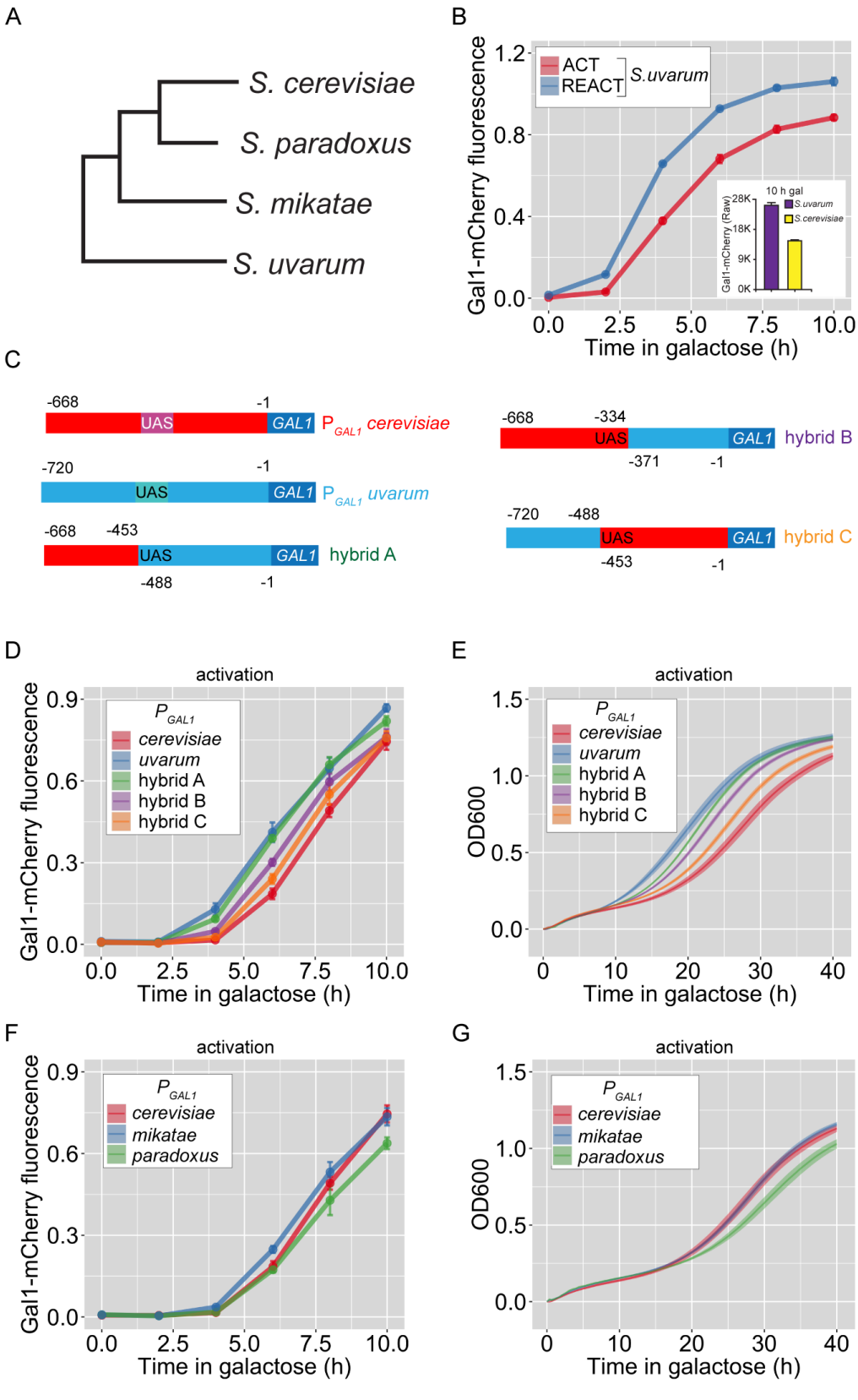
A
S. cerevisiae
S. paradoxus
S. mikatae
S. uvarum
B
ACT
REACT
S.uvarum
Gal1-mCherry fluorescence
Time in galactose (h)
10 h gal
Gal1-mCherry (Raw)
S.uvarum
S.cerevisiae
C
-668
-1
UAS
GAL1
P GAL1 cerevisiae
-720
-1
UAS
GAL1
P GAL1 uvarum
-668
-453
-488
-1
UAS
GAL1
hybrid A
-668
-334
-371
-1
UAS
GAL1
hybrid B
-720
-488
-453
-1
UAS
GAL1
hybrid C
D
activation
Gal1-mCherry fluorescence
Time in galactose (h)
P GAL1
cerevisiae
uvarum
hybrid A
hybrid B
hybrid C
E
activation
OD600
Time in galactose (h)
P GAL1
cerevisiae
uvarum
hybrid A
hybrid B
hybrid C
F
activation
Gal1-mCherry fluorescence
Time in galactose (h)
P GAL1
cerevisiae
mikatae
paradoxus
G
activation
OD600
Time in galactose (h)
P GAL1
cerevisiae
mikatae
paradoxus

Figure S2. *GAL1* promoter driven adaptation to galactose. Related to Figure 3. A. Dendrogram depicting the evolutionary relationship between different species in the *Saccharomyces* genus [S1]. **B.** *S. uvarum* cells harboring *GAL1-mCherry* and P_{TDH1}-*VENUS* were shifted from glucose to galactose (ACT) or grown overnight in galactose, shifted to glucose for 18 hours and then shifted to galactose (REACT). Gal1-mCherry fluorescence was measured relative to constitutively expressed Venus by flow cytometry. Inset: the raw Gal1-mCherry levels between *S. cerevisiae* and *S. uvarum* after 10 hours in galactose. **C.** Schematic of promoter hybrids between P_{GAL1} *cerevisiae* and P_{GAL1} *uvarum* that were inserted in place of the native *GAL1* promoter in *S. cerevisiae*. The UAS_{GAL4} in P_{GAL1} for both *S. cerevisiae* and *S. uvarum* is shown for reference. Gal1-mCherry fluorescence relative to CFP (**D**) and OD_{600} (**E**) in strains with the hybrid promoters described in **C,** upon shifting cells from glucose to galactose. **F-G**. The effect of substituting P*GAL1* from *S. mikatae* and *S. paradoxus* in place of native P*GAL1* in *S. cerevisiae* on Gal1-mCherry expression (**F**) and OD_{600} (**G**) in upon shift from glucose to galactose. Error bars represent SEM from ≥ 3 biological replicates for Gal1-mCherry fluorescence and ≥ 9 biological replicates for OD_{600} measurements. The yeast strains and the number of biological replicates for all experiments are listed in Table S1 and S2, respectively.

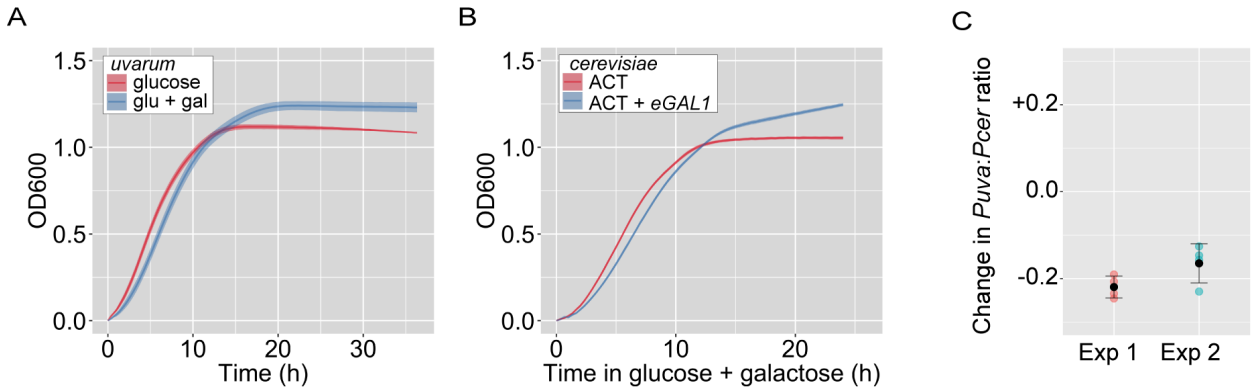

Figure S3. Basal *GAL1* expression leads to growth defects in mixed sugars. **Related to Figure 3.** OD_{600} was measured every 20 minutes. **A** and **B.** Wild-type *S. uvarum* cells (**A**) or *S. cerevisiae* cells with and without ectopic *GAL1* (**B**) were shifted from glucose to either a mixture of 1% glucose + 1% galactose or to glucose. Growth curves represent the average and the envelopes represent the SEM from ≥ 3 biological replicates. **C.** Competitive growth assay between *S. cerevisiae* cells containing native P_{GAL1}*cerevisiae* and P_{GAL1}*uvarum* in 1% glucose + 1% galactose. Venus fluorophore was constitutively expressed in either P_{GAL1}*cerevisiae* cells (Exp1) or P_{GAL1}*uvarum* cells (Exp2). Four independent biological replicates were performed for each experiment. Cells were mixed 1:1 *cerevisiae*:*uvarum* promoters. The fractions of cells expressing Venus were measured over time by flow cytometry. Plotted is the change in the ratio P_{GAL1}*uvarum* to P_{GAL1}*cerevisiae*, normalized to the initial ratio, after 36 h growth. The Malthusian selection coefficient for the strain having the *uvarum* P_{GAL1} was -0.005 ± 0.0007 in experiment 1 and -0.007 ± 0.0006 in experiment 2 [S2]. The yeast strains and the number of biological replicates for all experiments are listed in Table S1 and S2, respectively.

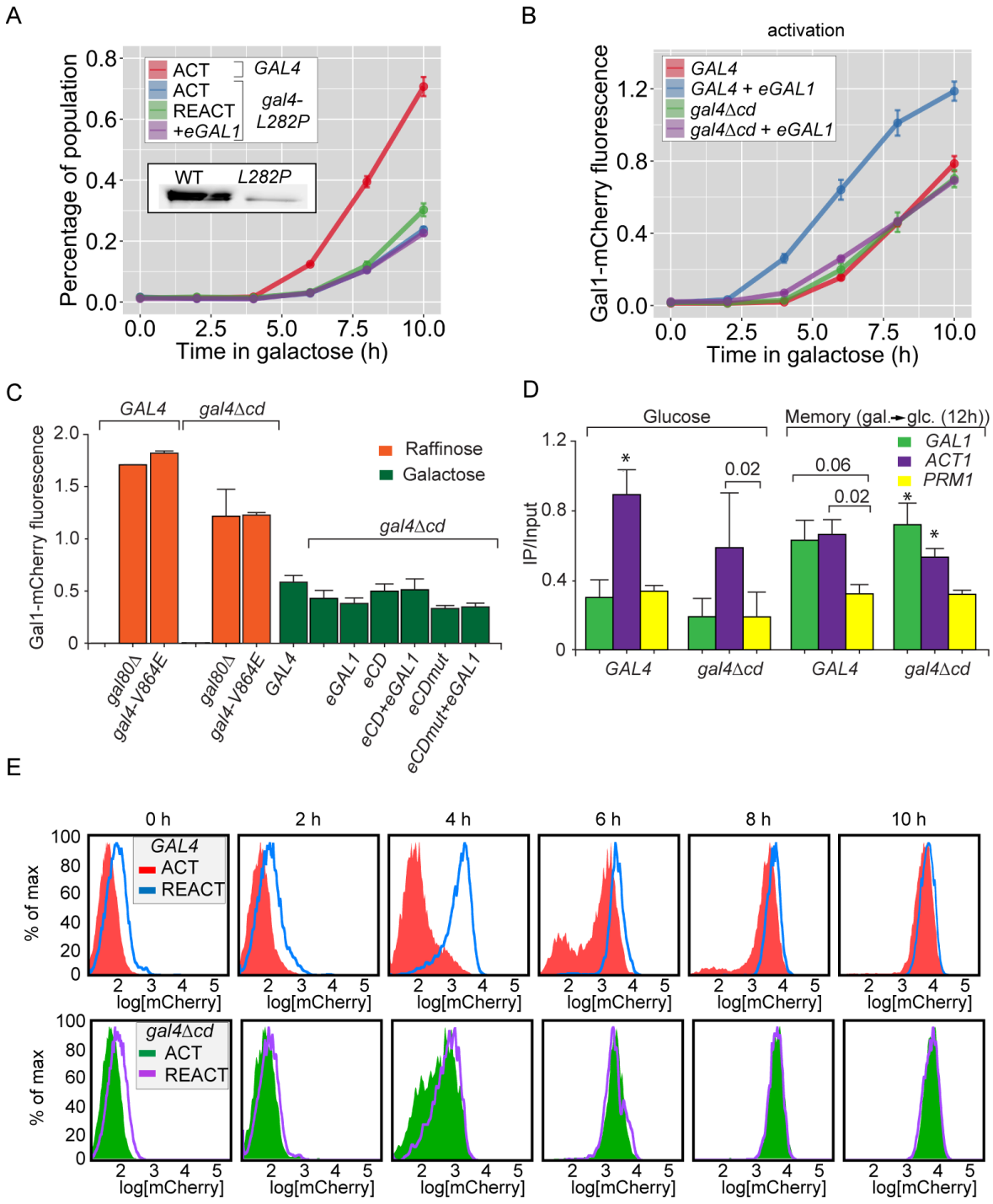

Figure S4. Gal4 central domain regulates potentiation and stochasticity downstream of Gal1 and chromatin changes during memory. Related to Figure 4 and 5. A, B & **E.** Naïve cells (ACT), naïve cells with ectopically expressed *GAL1* (*eGAL1*), or cells that were grown in galactose overnight and shifted to glucose for 12 hours (REACT), were shifted to galactose and Gal1-

mCherry fluorescence was measured relative to CFP control. **A.** The *gal4-L282P* mutant strain; Inset: immunoblot for immunoprecipitated Gal4 and gal4-L282P mutant. **B**. Wild-type and *gal4Δcd* mutant with and without ectopic *GAL1*. **C**. Steady state Gal1-mCherry levels relative to CFP in strains derived from *GAL4* cells and *gal4ΔCD* mutant cells, grown in raffinose and galactose. **D.** ChIP against H3K4me2 in wild-type and *gal4Δcd* mutants under long-term repressed (glucose) and memory (gal. → glc., 12h) conditions. Recovery of the *GAL1* promoter, positive control locus (*ACT1*) and negative control locus (*PRM1*), were quantified relative to input by real time quantitative PCR. * $p \leq 0.05$ (Student's t-test) relative to the ChIP enrichment of *PRM1*. **E.** Overlap of concatenated histograms of Gal1-mCherry between ACT and REACT, for wild-type cells (Top panel) or *gal4Δcd* mutant (Bottom panel). Error bars represent SEM from ≥ 3 biological replicates. The yeast strains and the number of biological replicates for all experiments are listed in Table S1 and S2, respectively.

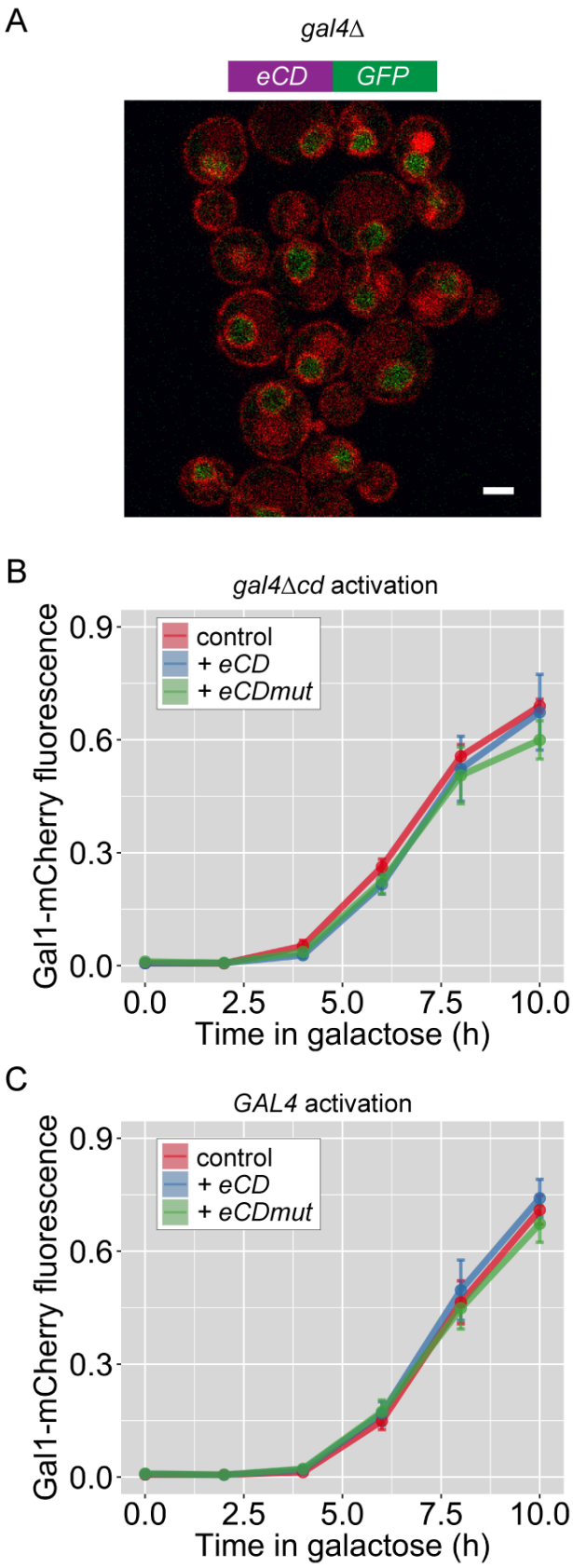
A
gal4Δ
eCD
GFP
B
gal4Δcd activation
control
+ eCD
+ eCDmut
Gal1-mCherry fluorescence
0.0
0.3
0.6
0.9
0.0
2.5
5.0
7.5
10.0
Time in galactose (h)
C
GAL4 activation
control
+ eCD
+ eCDmut
Gal1-mCherry fluorescence
0.0
0.3
0.6
0.9
0.0
2.5
5.0
7.5
10.0
Time in galactose (h)

Figure S5. Localization and function of Gal4 central domain. Related to Figure 5. A. Confocal micrograph showing localization of GFP fused central domain of Gal4 in *gal4Δ* cells expressing ER/nuclear envelope-targeted RFP. Gal1-mCherry fluorescence relative to CFP control in wild-type cells (**B**) and *gal4Δcd* mutant (**C**), expressing ectopic eCD or mutant eCDmut (L282P). Error bars represent SEM from ≥ 3 biological replicates. The yeast strains and the number of biological replicates for all experiments are listed in Table S1 and S2, respectively.

Table S1. Yeast Strains Used in this Study, Related to Figures 1-5. The genotype of the strains used for experiments in all the figures are indicated.

Strain Name	Genotype	Figures
CRY1	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1*	[S3]
CRY2	*MATalpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1*	[S3]
VSY034	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6*	Figure 1, 2, 4, 5, S3 [S4]
VSY057	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 URA3:pADH1pro-GAL1*	Figure 1, S3, 5 [S4]
VSY060	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 TRP1:pADH1pro-GAL1*	Figure 1 [S4]
VSY108	*MAT alpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX gal1D117V-mCHERRY:HIS3* GAL80-Myc:Trp1	Figure 2
VSY109	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6* GAL80-Myc:Trp1	Figure 2
VSY110	*MAT alpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX gal1D117V-mCHERRY:HIS3*	Figure 2, S1
yHMK 65 (*S. uvarum*)	MATa *hoΔ*::NatMX	Figure 3, S3 [S5]
JRY8153 (*S. uvarum*)	*MATa hoΔ::NatMX his3-11 lys2 trp1-1 ura3-1*	Figure 3 [S6]
VSY165 (*S. uvarum*)	*MATa hoΔ::NatMX his3-11 lys2 trp1-1 ura3-1 GAL1-mCHERRY:KanMX6 URA3:pTDH-VENUS*	Figure 3, S3
VSY088	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 pGAL1::URA3-SUP4-o*	Figure 3
VSY155	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 GAL7-VENUS:URA3*	Figure 3
VSY156	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1uvarum GAL1-mCHERRY:KanMX6 GAL7-VENUS:URA3*	Figure 3
VSY157	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1uvarum GAL1-mCHERRY:KanMX6*	Figure 3, S2
VSY158	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1uvarum gal1D117V-mCHERRY:KanMX6 GAL7-VENUS:URA3*	Figure 3
VSY159	MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD	Figure 4
VSY170	*MAT alpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:HIS3 gal4-L282P*	Figure S4
VSY164	*MAT alpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:HIS3 gal4-L282P URA3:pADH1pro-GAL1*	Figure S4
VSY111	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD TRP1:pADH1pro-GAL1*	Figure 4
VSY114	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD gal3Δ::HIS3 URA3:pADH1pro-GAL1*	Figure 4
VSY115	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD gal3Δ::HIS3*	Figure 4
VSY117	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 TRP1:dsRed-HDEL URA3:pADHpro-CD$_{GAL4}$-GFP*	Figure 5
VSY123	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-*	Figure 5

	NatMX GAL1-mCHERRY:KanMX6 TRP1:pADH1pro-GAL1 URA3:pADHpro-CD_{GAL4}	
VSY124	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 TRP1:pADH1pro-GAL1 URA3:pADHpro-$CD_{GAL4L282P}$*	Figure 5
VSY125	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD TRP1:pADH1pro-GAL1 URA3:pADHpro-CD_{GAL4}*	Figure 5
VSY126	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD TRP1:pADH1pro-GAL1 URA3:pADHpro-$CD_{GAL4L282P}$*	Figure 5
VSY127	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 URA3:pADHpro-CD_{GAL4}-GFP*	Figure 5
VSY128	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD URA3:pADHpro-CD_{GAL4}-GFP*	Figure 5
VSY129	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD TRP1:pADH1pro-GAL1 URA3:pADHpro-CD_{GAL4}-GFP*	Figure 5
VSY130	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD gal80Δ::HIS3 URA3:pADHpro-CD_{GAL4}*	Figure 5
VSY131	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD gal80Δ::HIS3 URA3:pADHpro-$CD_{GAL4L282P}$*	Figure 5
VSY160	*MAT alpha ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX gal1D117V-mCHERRY:HIS3 URA3:pADH1pro-GAL1*	Figure S1
VSY161	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1HybridA GAL1-mCHERRY:KanMX6*	Figure S2
VSY162	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1HybridB GAL1-mCHERRY:KanMX6*	Figure S2
VSY163	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX PGAL1HybridC GAL1-mCHERRY:KanMX6*	Figure S2
VSY132	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal80Δ::HIS3*	Figure 4
VSY133	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD gal80Δ::HIS3*	Figure 4
VSY136	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD-5XSPECTRIN*	Figure 4
VSY137	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD-CDLEU3*	Figure 4
VSY138	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD-5XSPECTRIN URA3:pADH1pro-GAL1*	Figure 4
VSY139	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD-CDLEU3 URA3:pADH1pro-GAL1*	Figure 4
VSY118	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 TRP1:ER04 URA3:pADHpro-CDgal4-GFP gal4Δ::HIS3*	Figure S5
VSY119	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 URA3:pADHpro-CD_{GAL4}*	Figure S5
VSY120	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 URA3:pADHpro-$CD_{GAL4L282P}$*	Figure S5
VSY121	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-*	Figure S5

	NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD URA3:pADHpro-CD$_{GAL4}$	
VSY122	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD URA3:pADHpro-CD$_{GAL4L282P}$*	Figure S5
VSY141	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX pGAL1mikatae GAL1-mCHERRY:KanMX6*	Figure S2
VSY142	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX pGAL1paradoxus GAL1-mCHERRY:KanMX6*	Figure S2
VSY200	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-$_{TDH}$-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4-V864E*	Figure 1
VSY201	*MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 HO::P-TDH-CFP-NatMX GAL1-mCHERRY:KanMX6 gal4ΔCD-V864E*	Figure 4

All strains are derived from *S. cerevisiae* unless specified

Table S2. Number of Biological Replicates, Related to Figures 1-5. The exact number of replicates for the all experiments in each figure panel are indicated.

Figure Panel	Experiment (Biological Replicates)
1B	ACT (12), REACT (9), ACT+*eGAL1* (6)
1C	WT Act (3), *gal80Δ* (3), *gal4-V864E* (3)
1C	ACT (12), REACT (9), ACT+eGAL1 (6), WT Act (3), *gal80Δ* (3), *gal4-V864E* (3)
1E	ACT (6), REACT (6), ACT+*eGAL1* (6)
1F	ACT (3), REACT (3), ACT+*eGAL1* (3)
1G	ACT (5), REACT (5), ACT+*eGAL1* (5)
1G(inset)	ACT (3), REACT (3), ACT+*eGAL1* (3)
2B	*GAL1* ACT (7), *GAL1* REACT (5), *gal1-D117V* ACT (5), *gal1-D117V* REACT (4)
2C	*GAL1* ACT (6), *gal1-D117V* ACT (4), *gal1-D117V* REACT (4), *GAL1* gal-.>gal (6), *gal1D117V* gal-.>gal (4)
2F	*gal1-D117V* ACT (4), *gal1-D117V* REACT (4)
3A	*cerevisiae* ACT (12), *cerevisiae* REACT (9), *uvarum* ACT (3), *uvarum* REACT (3)
3B	*cerevisiae* ACT (12), *cerevisiae* REACT (9), *uvarum* ACT (3), *uvarum* REACT (3)
3C	ACT (6), REACT (5)
3D	*cerevisiae* P_{GAL1} ACT (6), *cerevisiae* P_{GAL1}REACT (6), *uvarum* P_{GAL1} ACT (10), *uvarum* P_{GAL1}REACT (7)
3E	*cerevisiae* P_{GAL1}ACT (4), *cerevisiae* P_{GAL1}REACT (4), *uvarum* P_{GAL1} ACT (4), *uvarum* P_{GAL1} REACT (4)
3F	*cerevisiae* P_{GAL1} (6), *uvarum* P_{GAL1} (6)
3F (inset)	*cer.*(12), *uva.*(12)
3G	*cer.* P_{GAL1} (4), *uvar.* P_{GAL1} (4), *uvar.* P_{GAL1} *gal1D117V* (4)
3H	*cer.* P_{GAL1} (3), *uvar.* P_{GAL1} (3), *uvar.* P_{GAL1} *gal1D117V* (3)
3I	*uvar.* P_{GAL1} (6), *uvar.* P_{GAL1} *gal1D117V* (6)
4B	*GAL4* ACT (6), *GAL4* REACT (5), *gal4Δcd* ACT (4), *gal4Δcd* REACT (4)
4C	WT REACT (9), *gal4-5X spectrin* ACT (4), *gal4-5X spectrin* REACT (4), *gal4-5X spectrin +eGAL1* (4)
4D	WT REACT (9), *gal4-LEU3CD* ACT (4), *gal4-LEU3CD* REACT (4), *gal4-LEU3CD +eGAL1* (4)
4E	*GAL4 +eGAL1* (6), *gal4Δcd* (4), *gal4Δcd gal3Δ+eGAL1* (4), *gal3Δ* (3), *gal4Δcd gal3Δ* (3)
4F	*gal4Δcd* (3), *gal4Δcd gal80Δ* (3), *gal4Δcd-V864E* (3)
4G	*gal4Δcd* ACT (4), *gal4Δcd* REACT (4), *gal4Δcd +eGAL1* (4), *gal4Δcd* (3), *gal4Δcd gal80Δ* (3), *gal4Δcd-V864E* (3)
5C	*gal4Δcd* (10), *gal4Δcd +eCD* (3), *gal4Δcd +eCD + eGAL1* (7), *gal4Δcd eCDmut + eGAL1* (7)
5D	*gal4Δcd* (10), *gal4Δcd gal80Δ* (19), *gal4Δcd gal80Δ* (10), *gal4Δcd gal80Δ*

	(10)
5E	*gal4Δcd* (4), *gal4Δcd + eGAL1*(5), *GAL4* (3), *gal4Δcd + eCDmut* (3)
5F	*GAL4 +eGAL1* (3), *GAL4 +eGAL1 +eCD* (3), *GAL4 +eGAL1 +eCDmut* (3)
S1B	*GAL1* (3), *gal1-D117V* (3)
S1C	*GAL1* (4), *gal1-D117V* (4)
S1D	*GAL1* (6), *gal1-D117V* (4)
S2B	*S. uvarum* ACT (3), *S. uvarum* REACT (3)
S2D	P_{GAL1} *cerevisiae* (5), *uvarum* (3), hybrid A (7), hybrid B (7), hybrid C(7)
S2E	P_{GAL1} *cerevisiae* (9), *uvarum* (9), hybrid A (9), hybrid B (9), hybrid C(9)
S2F	P_{GAL1} *cerevisiae* (5), *mikatae* (6), *paradoxus* (4)
S2G	P_{GAL1} *cerevisiae* (6), *mikatae* (9), *paradoxus* (6)
S3A	*uvarum* glucose (4), glu + gal (5)
S3B	*cerevisiae* ACT (3), ACT +*eGAL1*(3)
S3C	Exp1(4), Exp2 (2)
S4A	*GAL4* ACT (12), *gal4-L282P* ACT (5), *gal4-L282P* REACT (5), *gal4-L282P +eGAL1* (3)
S4B	*GAL4* (7), *GAL4 +eGAL1* (4), *gal4Δcd* (4), *gal4Δcd +eGAL1* (4)
S4C	All (3)
S4D	All (3)
S4E	*GAL4* ACT (12), *GAL4* REACT (9), *gal4Δcd* ACT (4), *gal4Δcd* REACT (4)
S5B	*gal4Δcd* (3), *gal4Δcd +eCD* (3), *gal4Δcd + eCDmut* (4)
S5C	*GAL4* (3), *GAL4 + eCD* (3), *GAL4 + eCDmut* (4)

Supplemental References

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