

# Supplementary Materials

**Table S1.** *C. albicans* strains used in this study.

Strain Name	Genotype	Source
SC5314	Wild type	[1]
<i>sfp1Δ/Δ</i> 1-3	<i>sfp1Δ::FRT/sfp1Δ::FRT</i>	[2]
<i>sfp1Δ/Δ</i> 6-17	<i>sfp1Δ::FRT/sfp1Δ::FRT</i>	[2]
<i>SFP1</i> -reintegration	<i>sfp1Δ::SFP1-FRT/ sfp1Δ::SFP1-FRT</i>	[2]
<i>cas5Δ/Δ</i>	<i>cas5Δ::FRT/cas5Δ::FRT</i>	This study
<i>sfp1Δ/Δ cas5Δ/Δ</i>	<i>sfp1Δ::FRT/sfp1Δ::FRT</i> <i>cas5Δ::FRT/ cas5Δ::FRT</i>	This study
HA- <i>SFP1</i>	<i>sfp1Δ::FRT/sfp1Δ::FRT</i> ENO1/ENO1::HA- <i>SFP1</i>	This study

**Table S2.** Primers used in this study.

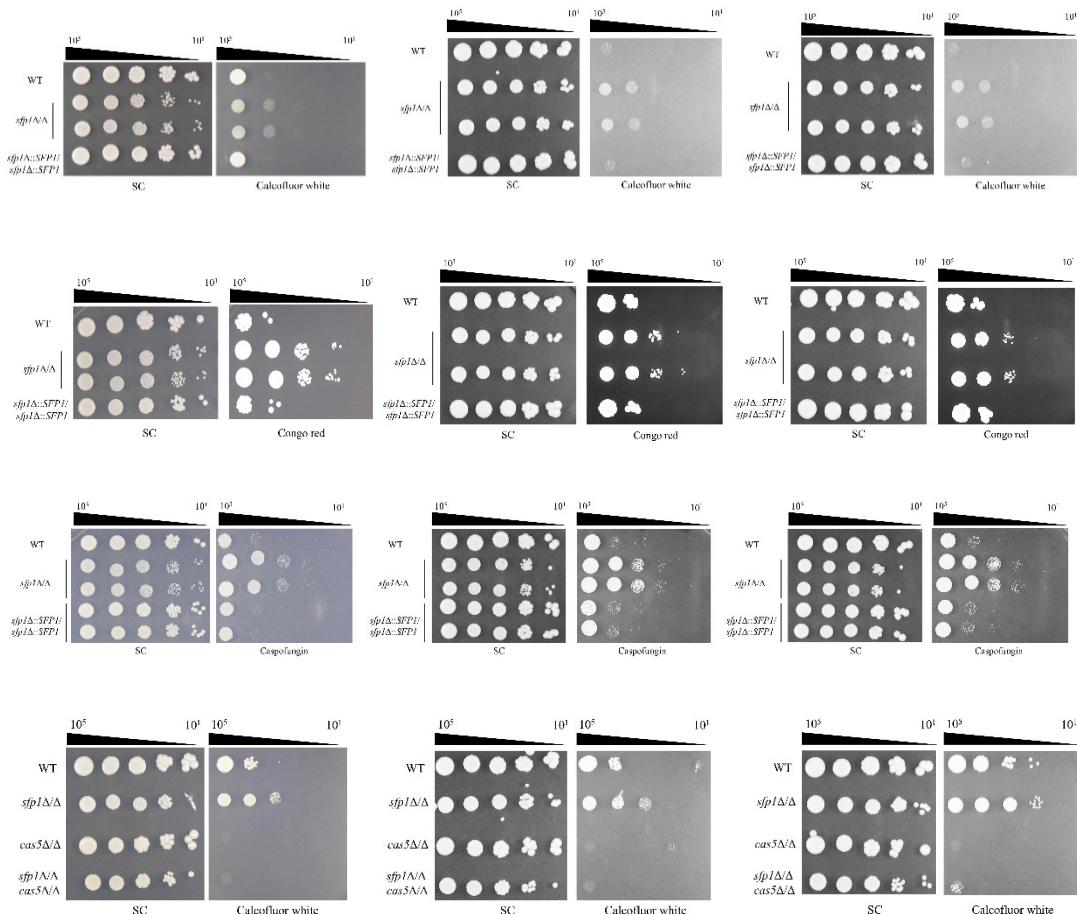
Primer Name	Sequence (5' to 3') <sup>a</sup>
<b>For real-time qPCR</b>	
qPMA1-F	TTGCTTATGATAATGCTCCATACGA
qPMA1-R	TACCCCCACAATCTTGGCAAGT
qFKS1-F	TGATACTGGTAATCATAGACCAAAAA
qFKS1-R	AACTCTGAATGGATTGTAGAATAAGG
qXOG1-F	GGGTTGTTATGCTAAAAAGGA
qXOG1-R	AATCTGTCAAAGCAGCAGACCAT
qCHS1-F	TTGGAACCGG TGGAACATCT
qCHS1-R	AGACCATAAGTGAGACAACAATGAA
qCHS3-F	TGTTTGTCTCAAAGCTGCTTGAA
qCHS3-R	AACGACGACGTTGCGATAATAA
qCHS8-F	AAACGAATGCTGATGGATCCA
qCHS8-R	CCAGCGACAATCCATAAAATGA
qSFP1-F	GCACGTCACCTCTACGTTATGG
qSFP1-R	CGATGACCAGGGCACTTG
CAS5-qF1	TGAAAACCTCTTCGAGGTCAT
CAS5-qR2	GCAGCAGTAACAGCAGCATTG
<b>For strain construction</b>	
CAS5UR-F-KpnI	GTG <u>GAGTACCC</u> CATCCACCCCCTACAATCAA
CAS5UR-R-XhoI	GACC <u>CTCGAGGGTGGGATGAAAAGCAAAGT</u>
CAS5DR-F-SacII	GCTT <u>CCCGGT</u> GAATGTCAAATGCCAAACTG
CAS5DR-F-SacI	GCAG <u>GAGCT</u> TCATCATGCGAGTTATGGTTT
SphI-HA-SFP1-F	<u>AGCATGC</u> tacgacgtaccagattacgcttacgacttacgattacgcttacgacttacgacttacgattacgtTTAACCAAGATATTGAAAATACAGG
SphI-HA-SFP1-R <sup>a</sup>	<u>AGCATGCT</u> TAATGAGTGGTATGCCAC
<b>For ChIP</b>	
CAS5 promoter qF	CAATATAAGCGGGTTATCTAGAATTAGAC
CAS5 promoter qR	ATCCACTAGTTAGGAAATACCTAATAAAC
ADE2 promoter qF	AATGAGCTGAATCCACGACAAA
ADE2 promoter qR	CACGTGACCCAAGAGTTAATGT

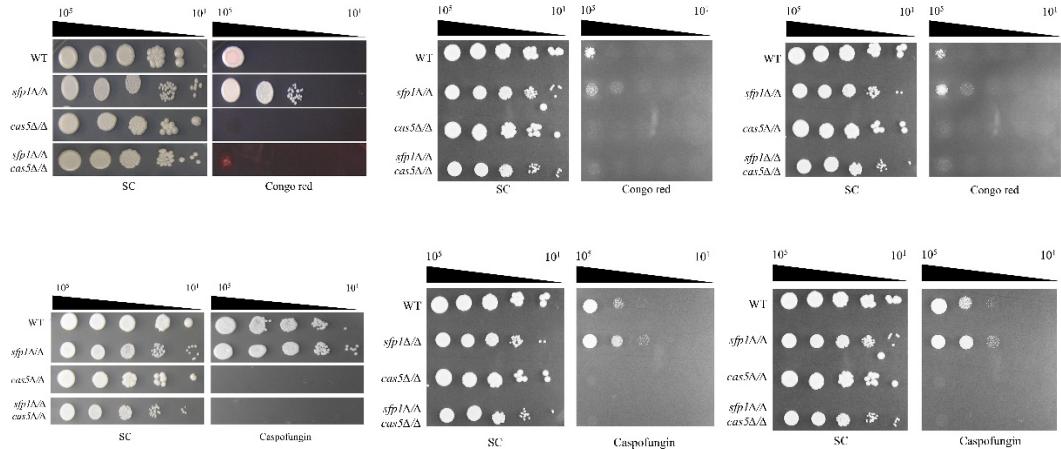
<sup>a</sup>The restriction sites are underlined and lowercase letters denote the HA tag sequence.

**Table S3.** Differential regulation of a subset of genes by Sfp1 and Cas5.

Orf19 ID	Gene Name	sfp1Δ/Δ v.s WT (Relative Fold Change) <sup>a,b</sup>	cas5Δ/Δ v.s WT (Relative Fold Change) <sup>c</sup>
<b>Glucan synthase &amp; Glucanase</b>			
orf19.2990	XOG1	26.25	-2.8
<b>GPI-anchored proteins</b>			
orf19.4765	PGA6	1.71	-2.1
orf19.2758	PGA38	1.62	-3
orf19.4910	FGR41	1.55	-2.78
<b>Adhesin</b>			
orf19.1816	ALS3	1.51	-1.73
orf19.5032	SIM1	2.57	-1.5
orf19.1258	C4_05730W_A	2.69	-5.16
<b>Others</b>			
orf19.4670	CAS5	1.96	-27.78
orf19.7218	RBE1	2.97	-2.73
orf19.2220	PIR1	1.53	-2.2
orf19.3893	SCW11	2.11	-3.1
orf19.3618	YWP1	1.96	-2.92
orf19.675	C1_11270W_A	2.45	-2.09

<sup>a</sup> Lee, S. Y., Chen, H. F., Yeh, Y. C., Xue, Y. P., & Lan, C. Y. (2019). The transcription factor Sfp1 regulates the oxidative stress response in *Candida albicans*. *Microorganisms*, 7(5), 131. <sup>b</sup> The GEO accession number GSE127184. <sup>c</sup> Xie, J. L., Qin, L., Miao, Z., Grys, B. T., Diaz, J. D. L. C., Ting, K., ... & Cowen, L. E. (2017). The *Candida albicans* transcription factor Cas5 couples stress responses, drug resistance and cell cycle regulation. *Nature Communications*, 8(1), 1-18.





**Figure S1.** Images of three independent experiments of spot assay shown in Figures 1a,b, 2 and 5a–c.

## References

1. Gillum, A.M.; Tsay, E.Y.; Kirsch, D.R. Isolation of the *Candida albicans* gene for orotidine-5'-phosphate decarboxylase by complementation of *S. cerevisiae ura3* and *E. coli pyrF* mutations. *Mol. Gen. Genet.* **1984**, *198*, 179–182.
2. Chen, H.F.; Lan, C.Y. Role of *SFP1* in the regulation of *Candida albicans* biofilm formation. *PLoS ONE* **2015**, *10*, e0129903.