SUPPLEMENTARY TABLES

TABLE S1. *Cryptococcus neoformans* strain list

|  |  |  |
| --- | --- | --- |
| **Strain name** | **Genotype** | **Source** |
| H99 | wild-type | (Perfect *et al.* 1980) |
| KK1 | *cna1*::*NEO* | (Kojima *et al.*) |
| KK2 | *cnb1*::*NAT* | (Kojima *et al.*) |
| AFA3-3 | *crz1*::*NAT* | (Chow *et al.* 2017) |
| ECt172 | *crz1*::*NAT* + p*CRZ1*-*mCherry*-*NEO* + p*GFP*-*NOP1-HYG* | (Chow *et al.* 2017) |
| CBN201 | *pfa4*::*NEO* | (Nichols *et al.* 2015) |
| CBN336 | *ras1*::*NEO s1571* | (Nichols *et al.* 2009) |
| ERB005 | *cdc42*::*NAT* | (Ballou *et al.* 2009) |
| ERB002 | *cdc420*::*NAT* | (Ballou *et al.* 2009) |
| CBN32 | *cdc24*::*NEO* | (Nichols *et al.* 2007) |
| CBN20 | *ste20α*::*NEO* | (Nichols *et al.* 2004) |
| MWC12 | *ras2*::*URA5* | (Waugh *et al.* 2002) |
| ERB056 | *rac1*::*HYG* | (Ballou *et al.* 2013b) |
| ERB028 | *rac2*::*NAT* | (Ballou *et al.* 2013b) |
| LK64 | *cdc3*::*NAT* | (Kozubowski and Heitman 2009) |
| LK162 | *cdc12*::*NEO* | (Kozubowski and Heitman 2009) |
| CBN12 | *pak1*::*NAT* | (Nichols *et al.* 2004) |
| KMP18 | *chs3*::*NEO* | This study |
| KMP45 | *msh1*::*NEO* | This study |
| KMP48 | *msh1*::*NAT* (KMP45) + pKP14 (*MSH1-NEO*) | This study |
| KMP13 | H99 + *eFKS1-GFP-NEO* | (Esher *et al.* 2018) |
| KMP36 | H99 + pKP11 (p*HIS-GFP-RHO1-NAT*) | This study |
| HP28 | *gcd2*::*NEO* | (Park *et al.* 2016) |
| HP36 | *anb1*::*NEO* | (Park *et al.* 2016) |
| HP9 | *tif3*::*NEO* | (Park *et al.* 2016) |
| HP17 | *puf4*::*NEO* | (Park *et al.* 2016) |
| HP22 | *lhp1*::*NEO* | (Park *et al.* 2016) |
| HP24 | *vts1*::*NEO* | (Park *et al.* 2016) |
| HP6 | *pbp1*::*NEO* | (Park *et al.* 2016) |
|  |  |  |

TABLE S2. Primers used in this study.

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| Primer Name | Sequence 5’🡪3’ | Construct or Target |
| **A. Deletion primers** | | |
| AA4108 | TCTCCCGTCCCTTTTCTACA | *CHS3* deletion primer 1 |
| AA4109 | GTCATAGCTGTTTCCTGTCCCTCCGCTAAAAAATTAG | *CHS3* deletion primer 2 |
| AA4110 | ACTGGCCGTCGTTTTACTACTACTTGCGGATAAACAT | *CHS3* deletion primer 3 |
| AA4111 | TCAGCATCTTTGGCTCTTCA | *CHS3* deletion primer 4 |
| AA4308 | GTAAAACGACGGCCAG | *NEO* marker primer F |
| AA4309 | CAGGAAACAGCTATGAC | *NEO* marker primer R |
| AA4137 | TCGTCTGTTAGCTGCTTCCA | *CHS3* deletion check primer R |
| AA441 | CGCCGCTCTCCAGCTCACATCC | *NEO* check primer F |
| AA440 | CGAATTCCAGCACACTGGCGGCCG | *NEO* check primer R |
| AA4800 | CGCACTCTCATATTCCACGAC | *MSH1* deletion primer 1 |
| AA4801 | GTCATAGCTGTTTCCTGGCAAGAGTTCCTGTTCCTGC | *MSH1* deletion primer 2 |
| AA4802 | ACTGGCCGTCGTTTTACGCAATTGTGAGACTAGCGGTC | *MSH1* deletion primer 3 |
| AA4803 | GCACCCTAGACGCTGATGAG | *MSH1* deletion primer 4 |
| AA4804 | GCCAGACTTGGGACTTACG | *MSH1* deletion check primer F |
| AA4805 | CTGAGTGATCGGCAAGCATC | *MSH1* deletion check primer R |
| **B. Cloning primers** | | |
| AA4798 | CGGTATCGATAAGCTCCTCATCCGTCATTTCTATG | *MSH1* for pSDMA57 F |
| AA4799 | ACCGCGGTGGCGGCCGAATCGTCCCATTCGGTG | *MSH1* for pSDMA57 R |
| AA4609 | CGTATAGGATCCATGTCCGGAGAAATCAGG | *RHO1* for pHGNAT F |
| AA4610 | CGTATAGGATCCGAGGCAGCTTGTGAGAAG | *RHO1* for pHGNAT R |
| **C. Real-Time PCR primers** | | |
| AA301 | AGTATGACTCCACACATGGTCG | *GPD1* F |
| AA302 | AGACAAACATCGGAGCATCAGC | *GPD1* R |
| AA5379 | GAGAAACTCGTCGAGTTGAAG | *CHS1* F |
| AA5380 | GAAGAGGAATGGTTGTACCGTTA | *CHS1* R |
| AA5381 | GCTCTTCACGTCTTCCACCTT | *CHS2* F |
| AA5382 | CGTAGAAGATAACGGTAAGGTAAG | *CHS2* R |
| AA4298 | ACCCAGGTCTGGCATTCC | *CHS3* F |
| AA4299 | AGGATCAACATTGGAAGC | *CHS3* R |
| AA3628 | CGGTCTTCAGGCATTGATTT | *CHS4* F |
| AA3629 | TTCGGAGTGAAGTGATGCTG | *CHS4* R |
| AA5383 | GCTTGGATGATCTTCTATATCTG | *CHS5* F |
| AA5384 | TACCTTCATCATGGATGACA | *CHS5* R |
| AA4905 | CCCTTGGCACATCTTTACTTG | *CHS6* F |
| AA4906 | CCATGACAAGTCGTGAAACATTG | *CHS6* R |
| AA5387 | GAGGAGCAACAAAGAAGTCAAG | *CHS7* F |
| AA5388 | GTTCGATTTTGATCGTCAAGGTT | *CHS7* R |
| AA5389 | TGGCTGTGATCTTACAAGCAA | *CHS8* F |
| AA5390 | GAATCGGAAGAAGGCAAGAC | *CHS8* R |
| AA3632 | TCGAGCTATTGCTGCTCAGA | *CDA1* F |
| AA3633 | GCTGGTAGATGTCGTGCTCA | *CDA1* R |
| AA4304 | GTAACGAGGTCGTCTTTG | *CDA2* F |
| AA4305 | TGTAGTTGGTGAGCTCGT | *CDA2* R |
| AA3652 | ATGTGGCCGATGCTTTTAAC | *CDA3* F |
| AA3653 | GAAGTGAGAAGGCCTGTTGG | *CDA3* R |
| AA5374 | CTTGGGCATGGTCTTGTTGCA | *AGS1* F |
| AA5375 | GCTGTTCCTCTAGCGAGCAT | *AGS1* R |
| AA3626 | TGGACTGGTGTTTGGTTCAA | *FKS1* F |
| AA3830 | GTACAAAAGACCGTACTTG | *FKS1* R |
| AA3654 | GTCTCGGAAGGCGACTCAT | *KRE6* F |
| AA3655 | TCAACTCATTCTTTGGGAAGG | *KRE6* R |
| AA3634 | CTGGACAATGTATGCGGATG | *SKN1* F |
| AA3635 | TCCGCAGTGGGATAATCTTC | *SKN1* R |

TABLE S3. Plasmid list

|  |  |
| --- | --- |
| **Plasmid name** | **Plasmid description** |
| pKP14 | pSDMA57-*MSH1* (Safe Haven NEO *MSH1* reconstitute) |
| pKP6 | pUC19-*eFKS1-GFP-NEO* |
| pKP11 | p*HIS-GFP-RHO1-NAT* |

TABLE S6. MICs for Calcineurin target mutants

|  |  |  |
| --- | --- | --- |
| **Gene locus Tag** | **Gene mutated** | **Caspofungin MIC μg/mL** |
| CNAG\_03448 | *GCD2* | 25 |
| CNAG\_01428 | *ANB1* | 25 |
| CNAG\_06906 | *TIF3* | 25 |
| CNAG\_02810 | *PUF4* | 25 |
| CNAG\_04570 | *LHP1* | 25 |
| CNAG\_06103 | *VTS1* | 25 |
| CNAG\_02046 | *PBP1* | 25 |