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SUPPLEMENTARY ONLINE DATA Rfa2 is specifically dephosphorylated by Pph3 in *Candida albicans*

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Figure S1 SDS/PAGE of immunopurified Pph3 from WT C. albicans cells

Left-hand side: C-terminally HA (haemagglutinin)-tagged Pph3 was immunopurified by an anti-HA antibody from *C. albicans* cells (HT28 and HT29) and resolved by SDS/PAGE (10 % gel). The asterisk denotes Pph3 and triangles denote the antibody fragments. Right-hand side: Western blotting of the immunopurified Pph3 using an anti-HA antibody.



Figure S2 Cell growth in wild-type, pph3 Δ /PPH3-H112A, pph3 Δ /PPH3 and pph3 Δ mutant cells

WT (SC5314 or BWP17), *pph3\Delta/PPH3-H112A* (HT29), *pph3\Delta/PPH3* (HT28) and *pph3\Delta* (SJL3) mutant cells were grown in liquid YPD medium at 30 °C for 4 h. Cells were counted in triplicate parallel experiments at the times indicated.

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Table S1 C. albicans strains used in the present study

Strains	Relevant genotype	Source
SC5314	WT. clinical isolate	
BWP17	ura3 /ura3 his1::hisG/his1::hisG aro4::hisG/aro4::hisG	[1]
SJI 2	BWP17 bbb3A: ABG4/ bbb3A: HIS1	[2]
SJL2.1	BWP17 pph3A:::ARG4/ pph3A::HIS1 PPH3:URA3	[2]
SJL3	BWP17 pph3A:::ARG4/ pph3A::HIS1 URA3	[2]
SIL5	BWP17 psy2 A - ABG4/ psy2 A - HIS1	[2]
SJI 5 1	BWP17 psy2 A: ABG4/ psy2 A: HIS1 PSY2/UBA3	[2]
SIL6	BWP17 psy2A · ABG4/ psy2A · HIS1 IBA3	[2]
HKD1 1	BWP17 bic2A··ABG4/ bic2A··HIS1 UBA3	The present study
HKD2	BWP17 pph3A:::ARG4/ pph3A::HIS1 ptc2A::FRT / ptc2A::FRT URA3	The present study
HT1	BWP17 BFA2-Mvc::UBA3	[2]
HT2	BWP17.pph3.4::ARG4/.pph3.4::HIS1.REA2-Mvc:URA3	[2]
HT3	BWP17 psy2 A - ABG4/ psy2 A - HIS1 BFA2-Myc; UBA3	[2]
HT4	BWP17 ttc2A::ABG4/ ttc2A::HIS1 BFA2-Mvc:UBA3	[2]
HT5	BWP17 ppl3A: ABG4/ppl3A: HIS1 ptc2A: EBT/ptc2A: EBT BFA2-Mvc:UBA3	[2]
HT25	BWP17 clrZA··ABG4/PMFT3-GLCZ··HIST BFA2-Mvc:/IBA3	The present study
HT26	BWP17 PPH3/PPH3-6MYC/URA3 BFA2/FFA2-GFP/HIS	The present study
HT27	BWP17 PSY2/PSY2-6MYC:UBA3 BFA2/BFA2-GFP-HIS	The present study
HT28	BWP17 ppl3A: ABG4/ ppl3A: HIS1 PPH3-HA1/BA3	The present study
HT29	BWP17 ppl3AABG4/ ppl3AHIS1 ppl3H112A-HA IIBA3	The present study
HT30	BWP17 PMET3-MYC- \40-BFA2: UBA3	The present study
HT31	BWP17 RFA2-190-MYC::URA3	The present study
HT32	BWP17 pph3A:::ARG4/pph3A::HIS1 PMET3-MYC-A40-RFA2::URA3	The present study
HT33	BWP17 pp13 ^::ABG4/pp13 ^::HIS1 BFA2-190-MYC::UBA3	The present study
WYS2	mrc1 A:: ABG4/mrc1 A:: HIS1	[3]
HT34	mrc1A::ABG4/mrc1A::HIS1 BFA2-Mvc UBA3	The present study
WYS1	rad9A::ABG4/rad9A::UBA3	[3]
HT35	rad9A::ARG4/rad9A::URA3 RFA2-Mvc HIS1	The present study
HT36	BWP17 mcc1_::ARG4/PMET3-MEC1::URA3	The present study
HT37	BWP17 mcc1_::ARG4/PMET3-MEC1::URA3 RFA2-Mvc:HIS	The present study
HT38	BWP17 Ime2A::ARG4/ime2A::HIS1	The present study
HT39	BWP17 Ime2A::ARG4/ime2A::HIS1 RFA2-Mvc:URA3	The present study
WY	BWP17 cdc28 _:: ARG4/PMET3-CDC28as:: URA3	[3]
HT40	BWP17 cdc28 _::ARG4/PMET3-CDC28as::URA3 RFA2-Mvc:HIS1	The present study
HT41	BWP17 RFA2-HIS-taq-URA3	The present study
HT42	BWP17 pph3_::ARG4/ pph3_::HIS1 RFA2-HIS-tag:URA3	The present study
HT43	BWP17 psy2A::ARG4/ psy2A::HIS1 RFA2-HIS-tag:URA3	The present study
HT44	BWP17 rfa2S18A/S30A-Myc::URA3	The present study
HT45	BWP17 pph3_::ARG4/ pph3_::HIS1 rfa2S18A/S30A-Myc::URA3	The present study
HT46	BWP17 psy2A::ARG4/ psy2A::HIS1 rfa2S18A/S30A-Myc::URA3	The present study
HT47	BWP17 rfa2T24A/T34A/T35A/T36A-Myc::URA3	The present study
HT48	BWP17 pph3_::ARG4/ pph3_::HIS1 rfa2T24A/T35A/T35A/T36A-Myc::URA3	The present study
HT49	BWP17 psy2A::ARG4/ psy2A::HIS1 rfa2T24A/T34A/T35A/T36A-Myc::URA3	The present study
HT50	BWP17 rfa2T43A/S146A/S153A-Myc::URA3	The present study
HT51	BWP17 rfa2T43A/S146A/S153A-Mýc::URA3	The present study
HT52	BWP17 rfa2T43A/S146A/S153A-Myc::URA3	The present study
HT53	BWP17 rfa2S211A/T213A/S247A-Myc::URA3	The present study
HT54	BWP17 pph3A::ARG4/ pph3A::HIS1 rfa2S211A/T213A/S247A-Myc::URA3	The present study
HT55	BWP17 psy2A::ARG4/ psy2A::HIS1 rfa2S211A/T213A/S247A-Myc::URA3	The present study
HT56	BWP17 rfa2S18A/T24A/T34A/T35A/T36A/T43A/S146A/S153A/S211A/T213A/S247A-Myc::URA3	The present study
HT57	BWP17 pph3_::ARG4/pph3_::HIS1 rfa2S18A/T24A/T35A/T35A/T35A/T43A/S146A/S155A/S211A/T213A/S247A-Myc::URA3	The present study
HT58	BWP17 psy22::ARG4/psy22::HIS1 rfa2S18A/T24A/T34A/T35A/T36A/T43A/S146A/S153A/S211A/T213A/S247A-Myc::URA3	The present study

REFERENCES

- Wilson, R. B., Davis, D. and Mitchell, A. P. (1999) Rapid hypothesis testing with *Candida albicans* through gene disruption with short homology regions. J. Bacteriol. **181**, 1868–1874
- 2 Wang, H., Gao, J., Li, W., Wong, A. H., Hu, K., Chen, K., Wang, Y. and Sang, J. (2012) Pph3 dephosphorylation of Rad53 is required for cell recovery from MMS-induced DNA damage in *Candida albicans*. PLoS ONE **7**, e37246
- 3 Shi, Q. M., Wang, Y. M., Zheng, X. D., Lee, R. T. and Wang, Y. (2007) Critical role of DNA checkpoints in mediating genotoxic-stress-induced filamentous growth in *Candida albicans*. Mol. Biol. Cell **18**, 815–826

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