

740 **Supplementary Figures and Tables**

741

742 **Table S1.** Strains used in this study and their respective MIC distributions.

Strain ID	Group	MIC Etest ($\mu\text{g/ml}$)		MIC EUCAST ($\mu\text{g/ml}$)	
		Mean	Range	Mean	Range
T9	ATR	32	32	2	2-4
T90	ATR	32	32	2	2-4
T5	ATR	32	32	4	2-4
T164	ATS	0,19	0.012-0.19	0,5	0,5-1
T175	ATS	0,19	0.094-0.19	0,5	0,5-1
T77	ATS	0,19	0.094-0.25	0,5	0,5-1
Afl25	AFLR	32	32	8	4-8
Afl22	AFLR	32	32	2	2
Afl20	AFLS	8	8	8	4-8

743

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

locus tag	gene ID	sequence 5' - 3'	amplicon size
ATEG_06543	<i>sod1</i>	GGCTCCAAGCAGGACAAG CTTGGACTCCTCGTTGCC	117
ATEG_03920	<i>sod2</i>	GGCTCGTCAAGGACAAGC TAAGCGTGCTCCCAAGCG	115
ATEG_00657	<i>sod3</i>	GCTGCTAGATTCACCCTC GCGTTGAGGTTGGTGATG	125
ATEG_03712	<i>sod4</i>	CAACTACGCCTCGATGGC AGAGGAGCAGGTGTCGAC	109
ATEG_09123	<i>sod5</i>	GCGGAGTGGGCATCATAG ACGGATCGAGGTGCTTGC	132
ATEG_00356	<i>sod6</i>	ACCGACAGCCCTATAGGC CGCGTAGCAGTTGCCATC	118
ATEG_04404	<i>sod7</i>	AGGATACAGGTCGCGACG GAGACCTGCACCATTCGC	130
ATEG_07477	<i>cat1</i>	TCCAGCGGTTTCGATCACG GAAGCGGCCGTGATGTTG	125
ATEG_08422	<i>cat2</i>	GACCTGGAGGCTCTCATG AAGACACGGTAGGTGCCG	113
ATEG_01487	<i>catC</i>	TGGCCAAAGACGACGAGC CCTGAAGGAGCAGAGGAC	132
ATEG_00794	<i>catA</i>	CGTCGACAACCAGCACTC CTTTGAGGCGGAAGGTCC	143
ATEG_07460	<i>percat</i>	CGTCCTGCTGCAAGACAC ATGCTGGAACCCACCCAG	107
ATEG_00287	<i>tub</i>	CTTTCCGTCCACCAGCTC GAGGGGTTGGAGAGCTTG	104

745

746

747 **Table S3.** Protein identities of genes encoding SOD homologs of *C. albicans*, *A. fumigatus* and *A.*
 748 *terreus*. Protein identities (percent identity) were calculated with ClustalOmega.

organism	description	locus tag	<i>A. terreus</i>							<i>A. fumigatus</i>						<i>C. albicans</i>					
			SOD1	SOD2	SOD3	SOD4	SOD5	SOD6	SOD7	SOD1	SOD2	SOD3	SOD4	SOD1	SOD2	SOD3	SOD4	SOD5	SOD6		
			ATEG_06543	ATEG_03920	ATEG_00657	ATEG_03712	ATEG_09123	ATEG_00356	ATEG_04404	AFUA_5G09240	AFUA_4G14500	AFUA_1G14550	AFUA_6G07210	AFUA_1G11640	AFUA_2G09700	SOD1Ca	SOD2Ca	SOD3Ca	SOD4Ca	SOD5Ca	SOD6Ca
<i>A. terreus</i>	SOD1	ATEG_06543	100	14,40	14,53	14,29	20,14	20,28	17,99	85,44	15,08	15,65	13,57	16,33	15,83	73,38	9,09	14,17	24,46	23,02	22,54
	SOD2	ATEG_03920	14,40	100	48,73	25,11	12,21	13,64	12,5	13,82	88,55	50,77	23,74	11,25	11,81	13,33	53,33	49,75	12,93	9,86	11,9
	SOD3	ATEG_00657	14,53	48,73	100	21,67	12,73	8,93	8,47	15,38	49,49	63,94	23,15	11,11	8,47	11,97	42,79	44,78	8,40	9,52	7,01
	SOD4	ATEG_03712	14,29	25,11	21,67	100	14,89	15,38	16,25	13,97	25,00	20,2	90,60	11,63	15,62	12,12	21,88	21,61	15,57	14,81	13,00
	SOD5	ATEG_09123	20,14	12,21	12,73	14,89	100	51,91	18,29	22,14	10,61	12,96	13,89	40,54	17,07	20,44	9,63	14,78	34,12	33,14	30,11
	SOD6	ATEG_00356	20,28	13,64	8,93	15,38	51,91	100	16,15	21,58	12,03	10,00	15,07	41,40	16,15	20,59	10,29	14,53	34,12	33,73	28,98
	SOD7	ATEG_04404	17,99	12,5	8,47	16,25	18,29	16,15	100	19,26	13,10	10,34	15,85	13,51	85,83	19,85	13,42	10,74	20,11	17,14	13,83
<i>A. fumigatus</i>	SOD1	AFUA_5G09240	85,44	13,82	15,38	13,97	22,14	21,58	19,26	100	13,71	14,78	13,24	19,01	17,04	72,73	10,16	15,00	23,7	25,93	23,19
	SOD2	AFUA_4G14500	15,08	88,55	49,49	25,00	10,61	12,03	13,10	13,71	100	51,53	24,09	11,18	12,41	13,22	53,3	51,98	12,16	9,09	11,18
	SOD3	AFUA_1G14550	15,65	50,77	63,94	20,20	12,96	10,00	10,34	14,78	51,53	100	21,67	12,03	11,21	15,65	49,75	51,76	10,69	10,32	9,55
	SOD4	AFUA_6G07210	13,57	23,74	23,15	90,60	13,89	15,07	15,85	13,24	24,09	21,67	100	11,43	15,3	11,36	21,88	22,11	14,71	13,94	13,3
		AFUA_1G11640	16,33	11,25	11,11	11,63	40,54	41,40	13,51	19,01	11,18	12,03	11,43	100	13,51	20,29	12,73	12,14	30,73	29,10	30,54
		AFUA_2G09700	15,83	11,81	8,47	15,62	17,07	16,15	85,83	17,04	12,41	11,21	15,3	13,51	100	17,56	12,75	10,74	20,67	17,14	14,89
<i>C. albicans</i>	SOD1	SOD1Ca	73,38	13,33	11,97	12,12	20,44	20,59	19,85	72,73	13,22	15,65	11,36	20,29	17,56	100	12,10	15,00	25,00	25,00	24,44
	SOD2	SOD2Ca	9,09	53,33	42,79	21,88	9,63	10,29	13,42	10,16	53,3	49,75	21,88	12,73	12,75	12,10	100	61,17	11,11	7,43	10,4
	SOD3	SOD3Ca	14,17	49,75	44,78	21,61	14,78	14,53	10,74	15,00	51,98	51,76	22,11	12,14	10,74	15,00	61,17	100	15,67	13,18	11,76
	SOD4	SOD4Ca	24,46	12,93	8,40	15,57	34,12	34,12	20,11	23,70	12,16	10,69	14,71	30,73	20,67	25,00	11,11	15,67	100	66,96	32,33
	SOD5	SOD5Ca	23,02	9,86	9,52	14,81	33,14	33,73	17,14	25,93	9,09	10,32	13,94	29,10	17,14	25,00	7,43	13,18	66,96	100	33,04
	SOD6	SOD6Ca	22,54	11,90	7,01	13,00	30,11	28,98	13,83	23,19	11,18	9,55	13,3	30,54	14,89	24,44	10,4	11,76	32,33	33,04	100

749

AmB resistance and ROS in *A. terreus*

750 **Table S4.** Protein identities of genes encoding CAT homologs *C. albicans*, *A. fumigatus* and *A.*
 751 *terreus*. Protein identities (percent identity) were calculated with ClustalOmega.
 752

organism	description	organism description locus tag	<i>A. terreus</i>					<i>A. fumigatus</i>					<i>C. albicans</i>
			CAT1 ATEG_07477	CAT2 ATEG_08422	CATC ATEG_01487	CATA ATEG_00794	Percat ATEG_07460	CAT1 AFUA_3G02270	CAT2 AFUA_8G01670	EasC AUFA_2G18030	CATA AFUA_6G03890	putative CAT AFUA_2G00200	CAT1 Ca
<i>A. terreus</i>	CAT1	ATEG_07477	100	16,87	35,96	38,83	31,11	82,39	16,13	30,91	38,84	32,42	35,6
	CAT2	ATEG_08422	16,87	100	15,07	16,73	12,86	16,47	81,99	13,73	16,07	16,52	14,36
	CATC	ATEG_01487	35,96	15,07	100	37,86	48,67	35,33	14,35	45,47	36,71	38,66	60,46
	CATA	ATEG_00794	38,83	16,73	37,86	100	32,06	40,54	16,3	31,28	83,06	31,06	38,64
	Percat	ATEG_07460	31,11	12,86	48,67	32,06	100	30,49	13,16	39,43	32,18	32,03	41,87
<i>A. fumigatus</i>	CAT1	AFUA_3G02270	82,39	16,47	35,33	40,54	30,49	100	15,75	31,92	40,18	32,32	36,32
	CAT2	AFUA_8G01670	16,13	81,99	14,35	16,3	13,16	15,75	100	13,97	15,67	14,87	13,88
	EasC	AUFA_2G18030	30,91	13,73	45,47	31,28	39,43	31,92	13,97	100	31,42	38,81	44,38
	CATA	AFUA_6G03890	38,84	16,07	36,71	83,06	32,18	40,18	15,67	31,42	100	30,29	36,32
	putative CAT	AFUA_2G00200	32,42	16,52	38,66	31,06	32,03	32,32	14,87	38,81	30,29	100	39,29
<i>C. albicans</i>	CAT1	Ca	35,6	14,36	60,46	38,64	41,87	36,32	13,88	44,38	36,32	39,29	100

753

754 **Table S5. AmB treatment differentially affects expression of SOD- and CAT-encoding genes in**
 755 ***A. terreus* ATS and ATR.** Cultures (ATS, n=3; ATR, n=3) were incubated in RPMI1640 liquid
 756 media for 24 h at 37° C and 200 rpm. AmB (1 µg/ml) was added for 1h and 4 h, respectively. Gene
 757 expression during AmB treatment was determined by real-time RT-qPCR and expression was
 758 normalized to beta-tubulin according to the $2^{-\Delta\Delta CT}$ method. Data are represented as mean \pm standard
 759 deviation from three independent experiments with three ATS and three ATR isolates per
 760 experiment, respectively in technical duplicates.

		1h AmB		4h AmB	
gene	locus tag	ATS	ATR	ATS	ATR
<i>sod1</i>	ATEG_06543	3.16 \pm 0.68	1.47 \pm 0.34	5.03 \pm 0.73	1.08 \pm 0.16
<i>sod2</i>	ATEG_03920	1.13 \pm 0.10	2.03 \pm 0.06	1.53 \pm 0.15	2.40 \pm 0.40
<i>sod3</i>	ATEG_00657	1.58 \pm 0.51	2.31 \pm 0.09	0.78 \pm 0.11	1.09 \pm 0.28
<i>sod4</i>	ATEG_03712	0.93 \pm 0.13	0.53 \pm 0.10	1.33 \pm 0.31	0.48 \pm 0.09
<i>sod5</i>	ATEG_09123	1.86 \pm 0.52	0.77 \pm 0.12	4.37 \pm 1.85	1.97 \pm 0.68
<i>sod6</i>	ATEG_00356	1.26 \pm 0.98	0.74 \pm 0.68	7.01 \pm 3.25	1.08 \pm 0.68
<i>sod7</i>	ATEG_04404	0.42 \pm 0.05	0.40 \pm 0.07	4.20 \pm 0.40	0.88 \pm 0.25
<i>cat1</i>	ATEG_07477	3.34 \pm 0.56	2.52 \pm 0.75	9.58 \pm 0.40	27.55 \pm 2.69
<i>cat2</i>	ATEG_08422	1.61 \pm 0.54	2.65 \pm 0.54	4.53 \pm 1.93	43.71 \pm 9.46
<i>catC</i>	ATEG_01487	1.26 \pm 0.32	1.20 \pm 0.29	4.01 \pm 0.97	2.55 \pm 0.58
<i>catA</i>	ATEG_00794	2.73 \pm 1.19	1.27 \pm 0.14	4.66 \pm 2.09	5.53 \pm 1.04
<i>percat</i>	ATEG_07460	2.35 \pm 0.43	0.92 \pm 0.13	4.13 \pm 0.75	3.44 \pm 1.33

761

762 **Table S6.** Radial growth assays using the CAT and SOD inhibitors 3-AT and DDC. 100 conidia
 763 were point inoculated and growth diameter was measured. Results are given as percent of the control
 764 conditions. Experiments were performed with 3 ATS and 3 ATR and repeated 3 times.

	Radial growth [percent untreated control]		Ratio
	ATS	ATR	ATR/ATS
control	100,00 ± 8,18	100,00 ± 6,90	1,00
3-AT			
[100 µM]	98,20 ± 5,56	93,10 ± 5,19	0,95
[500 µM]	96,40 ± 6,51	93,10 ± 5,19	0,97
[1 mM]	96,40 ± 6,51	82,76 ± 11,75	0,86
[2 mM]	85,49 ± 18,44	79,31 ± 18,43	0,93
[4 µM]	58,21 ± 5,44 *	65,52 ± 7,47 *	1,13
DDC			
[12.5 µM]	94,54 ± 3,35	100,00 ± 4,83	1,06
[25 µM]	74,58 ± 4,24 *	93,10 ± 5,19	1,25
[50 µM]	78,18 ± 4,05 *	84,14 ± 5,74	1,08
[100 µM]	56,36 ± 5,61 *	51,72 ± 47,07 *	0,92

765