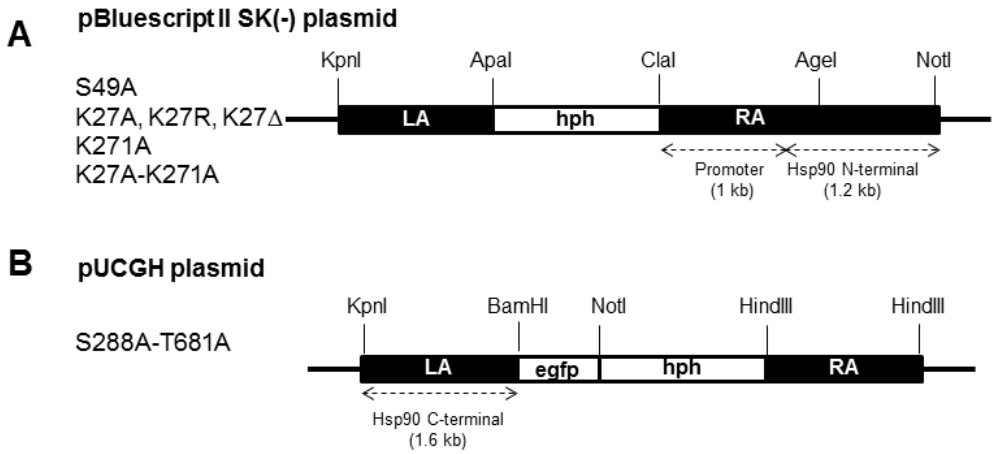
Supplementary Material.

Table S1. Primers used in this study.

T681A-S288A Strain		
Hsp90-1363-F (KpnI)	TATAGGTACCGACTCTTGCCAAGCTGCTCCGCTA	Forward
Hsp90-3179-R (BamHI)	TTGGATCCGTCAACCTCCTCCATGGCACTCT	Reverse
Hsp90-569-F (KpnI)	CCGTGGTACCAAGATCATTC	Forward
Hsp90-EGFP-R (NotI)	CCGGGCGGCCGCTTTACTTGTACA	Reverse
pUCGH-RA-F (HindIII)	TTAAGCTTTATTCTCGTTCACTCGC	Forward
pUCGH-RA-R (HindIII)	TTAAGCTTGGTACCTGGCGTCTATAAAACCCTTCC	Reverse
T681A-F	AGGAGGCCGAGGCTACCGAGGAAA	Forward
T681A-R	TTTCCTCGGTAGCCTCGGCCTCCT	Reverse
S288A-F	AGGAGTATGCCGCCTTCTACAAGT	Forward
S288A-R	ACTTGTAGAAGGCGGCATACTCCT	Reverse
S49A, K27A, K27R, K27Δ, K271A, K27A-K271A Strains		
pBS-LA-F (KpnI)	TTGGTACCACGTGAGCCGCCAGAAGGTATG	Forward
pBS-LA-R (ApaI)	TTGGGCCCTGCAGCCCCAATGAAAGC	Reverse
pHsp90-F (ClaI)	GTGTATCGATATAGGTGGCGAGCTGGTTTTCC	Forward
Hsp90-1200-R (NotI)	TTGCGGCCGCGAGTCTCACGAGACAGGTTG	Reverse
Hsp90-1236-F (AgeI)	ATACCGGTATTGGTATGACCAAGG	Forward
S49A-F	TCCGCTACCAGGCCTTGTCGGAT	Forward
S49A-R	ATCCGACAAGGCCTGGTAGCGGA	Reverse
K27A-F	TCTACTCCAACGCGGAGATCTTCC	Forward
K27A-R	GGAAGATCTCCGCGTTGGAGTAGA	Reverse
K27R-F	TCTACTCCAACAGGGAGATCTTCC	Forward
K27R-R	GGAAGATCTCCCTGTTGGAGTAGA	Reverse
K27Δ-F	GTCTACTCCAACGAGATCTTCCTG	Forward
K27Δ-R	CAGGAAGATCTCGTTGGAGTAGAC	Reverse
K270A-F	TCAACAAGACCGCGCCCATCTGGA	Forward
K270A-R	TCCAGATGGGCGCGGTCTTGTTGA	Reverse

The mutated nucleotides are underlined in the complementary primers used for fusion PCR.

Figure S1. Genetic constructs of this study.

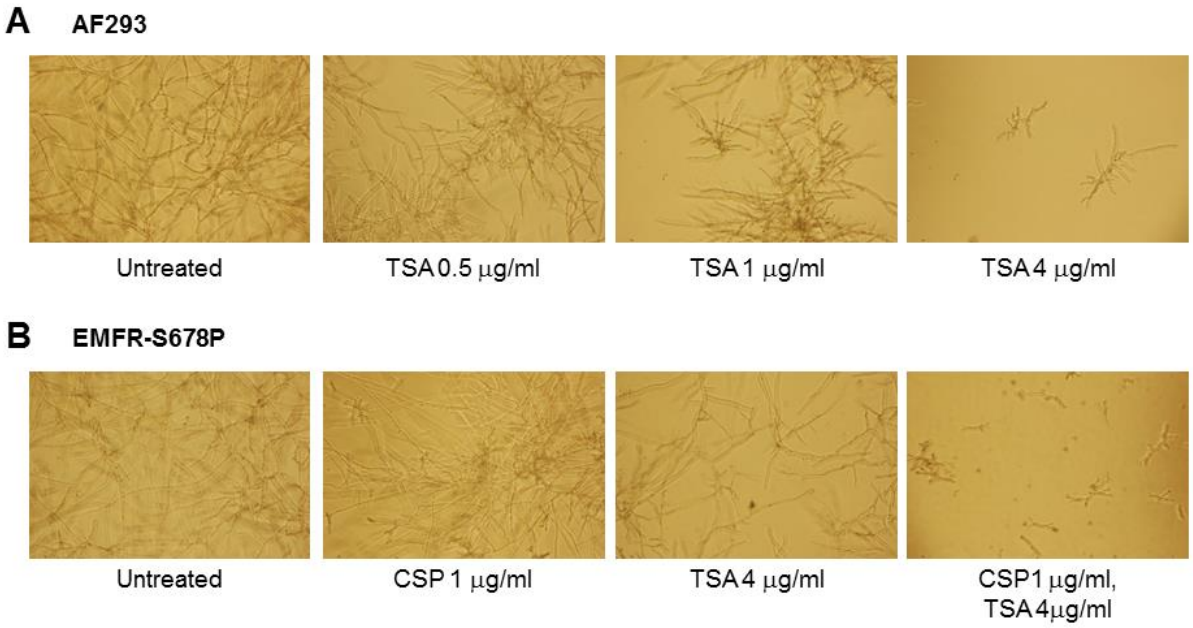


(A) A sequence containing the *hsp90* promoter and the 1 to 1.2 kb N-terminal region of *hsp90* containing the selected mutation was cloned in plasmid pBluescript II SK(-) downstream of the hygromycin resistance cassette (*hph*) at ClaI and NotI sites (right arm, RA). The AgeI site was used for the addition of the segment containing the K271A mutation to obtain the double K27A-K271A mutant. The left arm (LA) consisted of an approximately 1-kb sequence located downstream of the *hsp90* promoter and cloned at KpnI and ApaI sites.

(B) For the S288A-T681A strain containing mutations that are located in the distal portion, the 1.6-kb C-terminal sequence of *hsp90* was cloned at KpnI and BamHI sites (left arm, LA) in the pUCGH plasmid containing the enhanced green fluorescent protein gene (*egfp*), the hygromycin resistance cassette (*hph*) and a right arm (RA) consisting of an approximately 1.2 kb sequence

located downstream of Hsp90 cloned at HindIII site. The more distal mutation (T681A) was induced first by cloning the product of a fusion PCR at KpnI and NotI sites. The S288A mutation was then induced by a second fusion PCR amplified from this first amplicon and cloned at KpnI and BamHI sites.

Figure S2. *In vitro* activity of the lysine deacetylase inhibitor trichostatin A (TSA) against *Aspergillus fumigatus*.



(A) The *in vitro* activity of TSA was tested against the *A. fumigatus* wild-type strain AF293 within a range of concentrations from 0.125 to 8 µg/ml. The minimal effective concentration (MEC) was assessed at 0.5 µg/ml, while 50% and 90% inhibition were achieved at 1 µg/ml and 4 µg/ml, respectively.

(B) TSA only had a modest activity against the EMFR-S678P strain, resistant to caspofungin (CSP). However, TSA reduced resistance to caspofungin achieving more than 50% inhibition in drug combination.

Pictures taken after 24-hour growth in RPMI 1640.