Supplementary information to accompany:

Combating pathogens with $Cs_{2.5}H_{0.5}PW_{12}O_{40}$ nanoparticles: A new proton-regulated antimicrobial agent

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Figures referenced in paper:

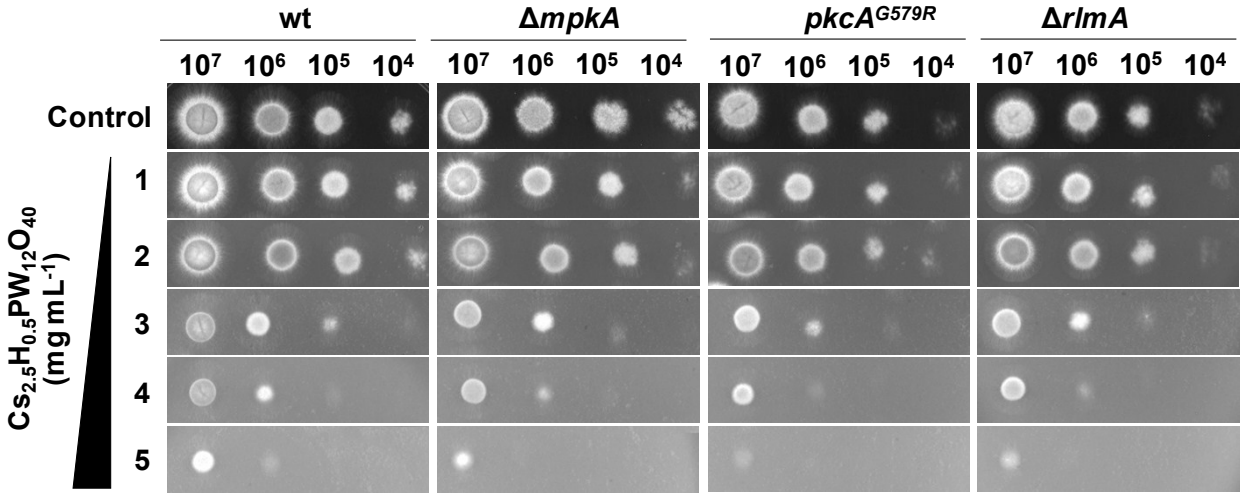

Fig. S1. Comparative sensitivity of *A. fumigatus* wild-type (wt) and its mutants Δ*mpkA*, *pkcA*^{G579R}, and Δ*rlmA* [1–3] to $Cs_{2.5}H_{0.5}PW_{12}O_{40}$ NPs. For the test, conidia were dispersed in Milli-Q water and, then, filtered through Miracloth membrane (Merck). After filtration, the suspensions were diluted at concentrations of 10^7, 10^6, 10^5, and 10^4 conidia mL^{-1}. To perform the sensitivity test, 5 µL of each suspension was dropped over Petri dishes with YG agar containing 1 to 5 mg mL^{-1} of $Cs_{2.5}H_{0.5}PW_{12}O_{40}$ NPs. After inoculation, the plates were incubate at 37 ºC for 24 h and then photographed.

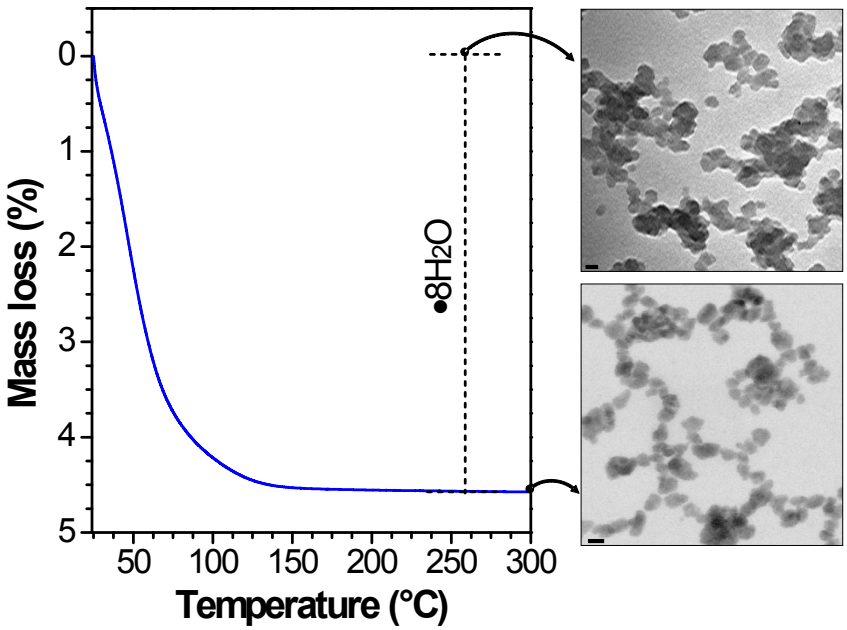

Fig. S2. Thermogravimetric analysis of $Cs_{2.5}H_{0.5}PW_{12}O_{40}$ NPs. The mass loss of 4.6 wt% is associated with the structural water molecules. TEM images compares the particle size of the (upper) as-synthesized $Cs_{2.5}H_{0.5}PW_{12}O_{40}$ NPs and (bottom) after heat treatment at 300 °C for 2 h. Even after the heat treatment, the average particle size remains about 10 nm. Scale bars correspond to 10 nm.

References

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