Supplemental Material

Strains used in this study

Supplemental table S1 describes the known features of the strains used in this study and gives references and origin where available**.**

Expanded fungal panel

To investigate the robustness of the measured MIC values on the strains presented in **table 3** we have expanded the testing to additional strains, mostly clinical isolates (see **supplemental table S1**). As presented in **supplemental table S2** the general activity on these species and target inhibition bypass upon addition of valine and isoleucine but not lysine could be confirmed across the entire panel of strains.

HIP HOP Profiles for all compounds used in this study

The complete HIP HOP profiles are provided as tab delimited .txt files contained in the compressed **Supplemental_Material_S3.zip** file. The digital file is available on the Dryad website (http://dx.doi.org/10.5061/dryad.qb753). The sensitivity and z-scores for all HIP strains present in the pool across all tested compounds are listed in the HIP-exp-scores-annotation.txt file. Scores for all HOP strains present in the pool are listed in the HOP-exp-scores-annotation.txt file. To reproduce the plots depicted in the article the sensitivity can be plotted on the y-axis, the z-score on the x-axis. Each gene is annotated with systematic name, common name, description, GO category etc.

24   *In silico* **docking model**

25   The presented *in silico* docking solution is provided as a standard Protein Data Bank file named

26   1N0H_compound1_docked.pdb. contained in the **Supplemental_Data_S4.zip** file. The digital

27   file is available on the Dryad website (http://dx.doi.org/10.5061/dryad.qb753). UNK1

28   refers to the docked compound 1, all other structures are labeled as in the original 1N0H.pdb file

29   downloaded from RCSB protein databank www.pdb.org.