## Supplementary Table S1. RT-qPCR primers

	Forward primer	Reverse primer		
DENV-1	- 5′- CAATATGCTGAAACGCGAGAGAA - A-3′	5'-CGCTCCATACATCTTGAATGAG-		
		3′		
DENV-2		5'-AAGACATTGATGGCTTTTGA-3'		
DENV-3		5'-AAGACGTAAATAGCCCCCGAC-		
		3′		
DENV-4		5'-		
		AGGACTCGCAAAAACGTGATGAA		
		T-3′		
Actin	5'ATTGCCGACAGGATGCAGAA-3'	5'-GCTGATCCACATCTGCTGGAA-3'		



**Figure S1.** The effect of micafungin on DENV-2 replication. RT-qPCR assay was used to quantify the RNA level. All data were obtained from at least four independent experiments, where significance was indicated as follows: \*p<0.05; \*\*p<0.01; \*\*\*p<0.001.



**(B)** 



**Figure S2.** The virucidal assay of **(A)** anidulafungin and **(B)** caspofungin. IFA was used to calculate the foci of DENV-2, and the results were performed by percentage of positive cell compared with virus control. All data were obtained from at least six independent experiments, where significance was indicated as follows: \*p<0.05; \*\*p<0.01; \*\*\*p<0.001.

(A)



**Figure S3.** The cell viability via CCK-8 assay. The cell viability was determined by CCK-8 assay (A) micafungin for 3day incubation, (B) anidulafungin, and (C) caspofungin for 2day incubation.

Supplementary Table S2. The structures, preparations, Cytotoxicity (CC50), inhibition concentration (IC50), and selective index (SI) of micafungin and its analogs

Drug name	Structure	Stock concentration / Solvent	The highest concentration / Cytotoxicity	IC <sub>50</sub>	CC50	SI
Micafungin	Chain B 202T Chain B 202T Chain B 202T Chain B 202H	50mM / Water	100μM / none	10.23µM	>200µM	>19.55
Anidulafungin	Chain B 28G, 29S HO HO HO HO HO HO HO HO HO HO	50mM / DMSO	20μM / none	3.24µM	>20µM	>6.17
Caspofungin	Chain A 278L $H_2$ N $H_2$ N	10mM / Water	100μM / none	20.78µM	>200µM	>9.62

\*The hydrogen bond is shown in blue, and the covalent bond shown in orange.