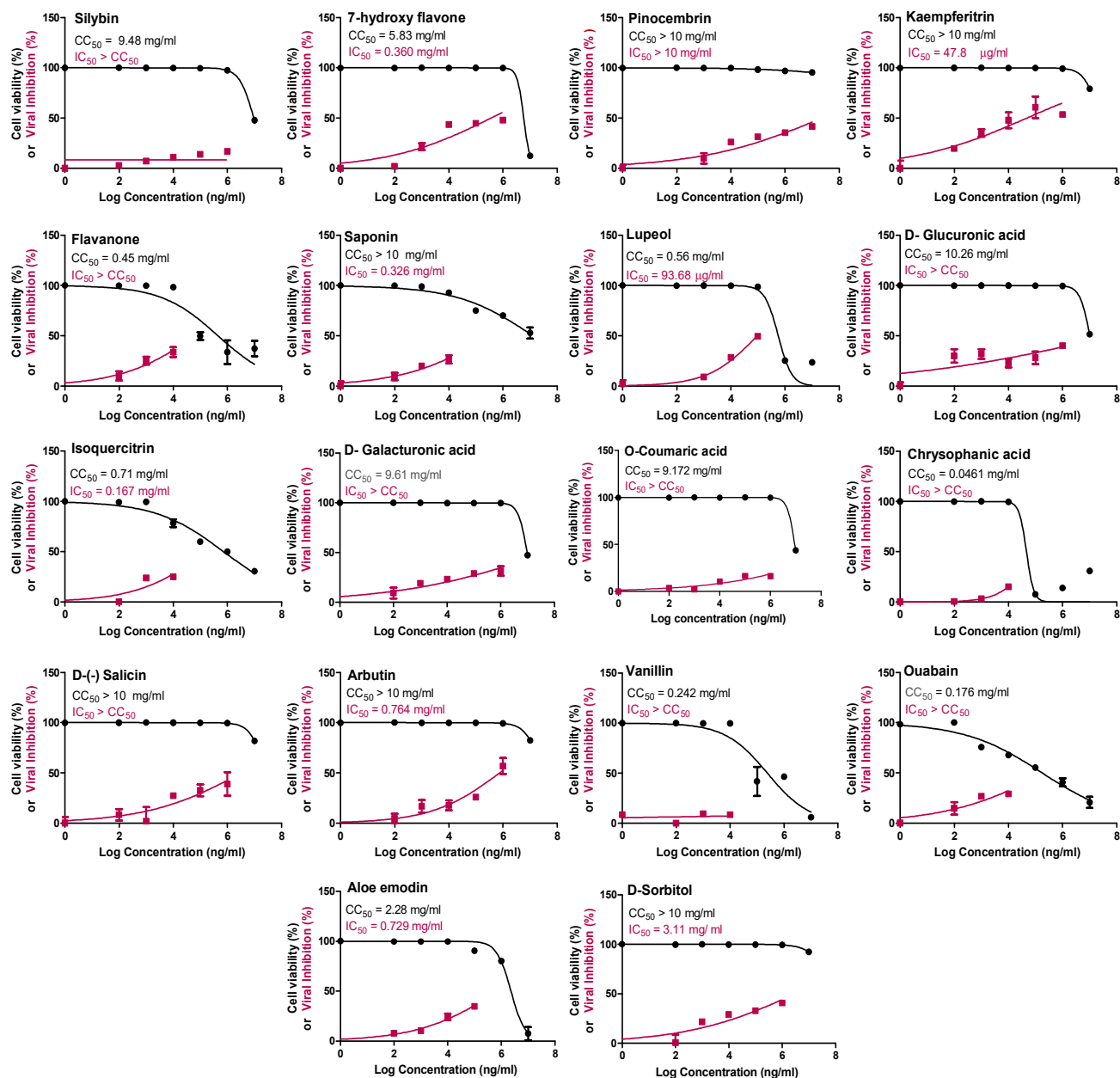
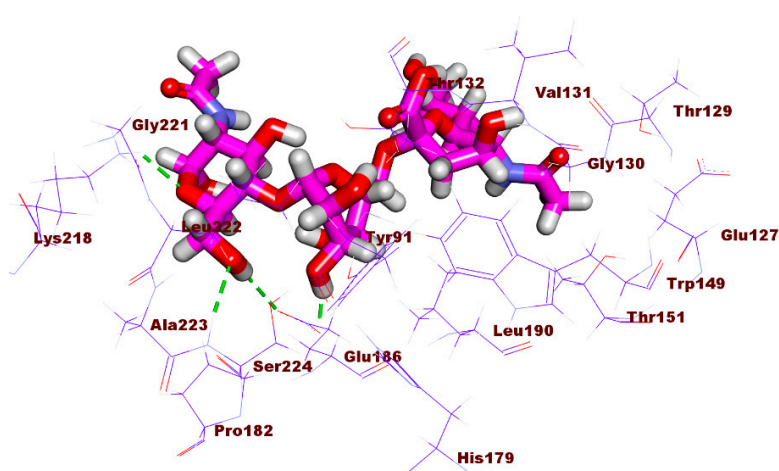


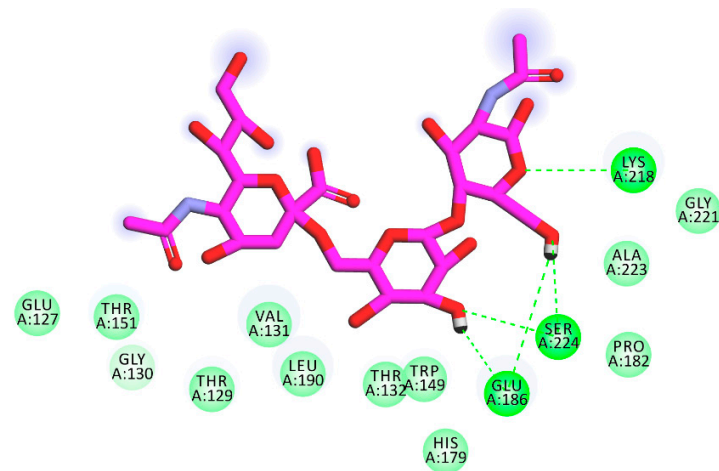
Supplementary Material



Supplementary Figure S1. The cytotoxicity as expressed in CC₅₀ (half maximal cytotoxic concentration) and the antiviral efficacy against A/H1N1 as expressed in IC₅₀ (half maximal inhibitory concentration) for the studied phytochemicals. GraphPad Prism 5.01 software was used to analyze the nonlinear regression while the CC₅₀ and IC₅₀ were determined by plotting log inhibitors against normalized response (variable slope).

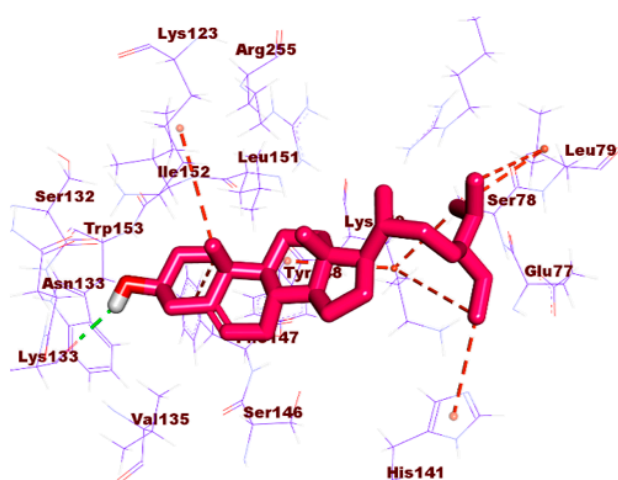


(a)

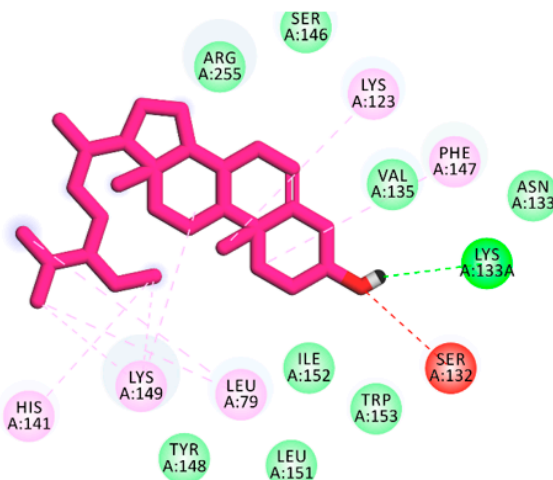


(b)

Supplementary Figure S2. (a) 3D of 6'-sialyl-*N*-acetylactosamine docked into the active site of influenza hemagglutinin H1 mutant DH1E. (b) 2D of 6'-sialyl-*N*-acetylactosamine docked into the active site of influenza hemagglutinin H1 mutant DH1E



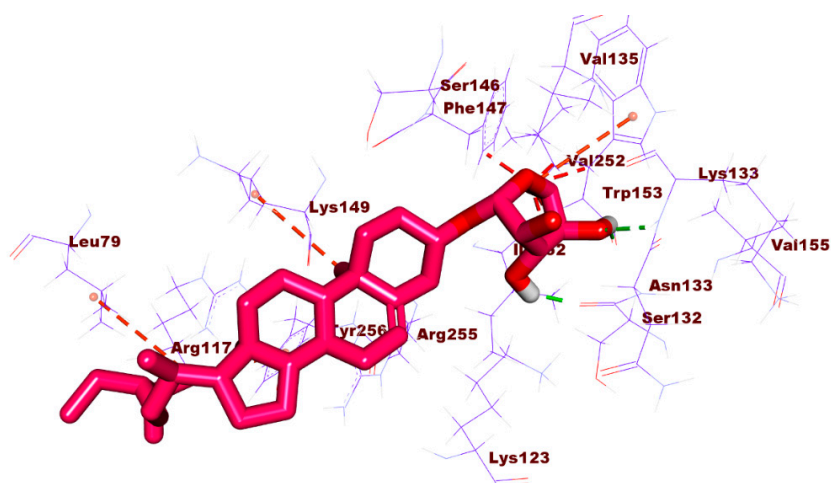
(a)



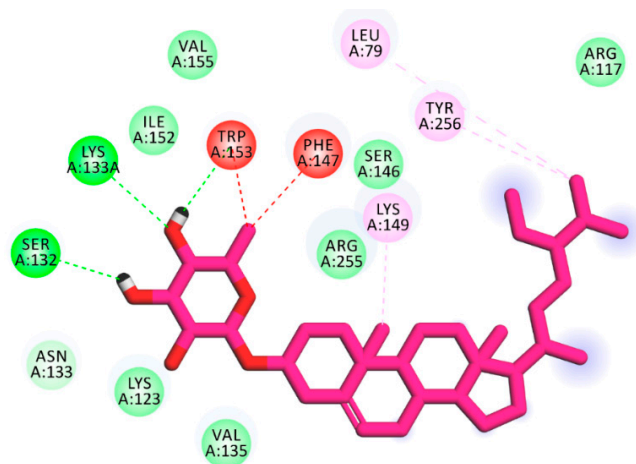
(b)

Supplementary Figure S3. (a) 3D of β -sitosterol docked into the active site of influenza hemagglutinin H1 mutant DH1E (b) 2D of β -sitosterol docked into the active site of influenza hemagglutinin H1 mutant DH1E

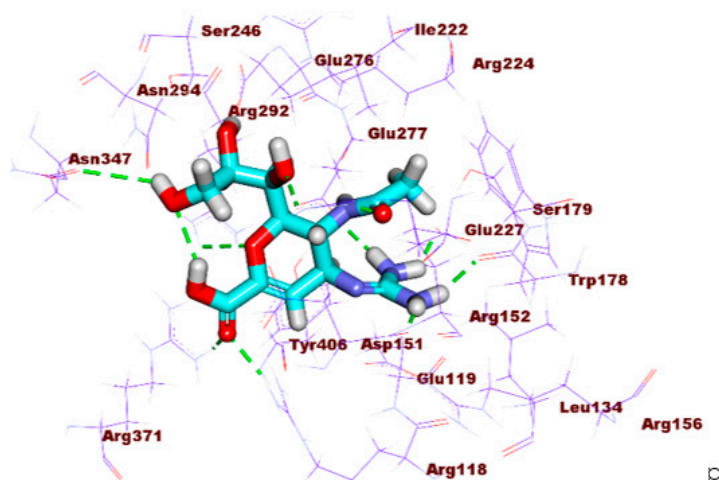
(a)



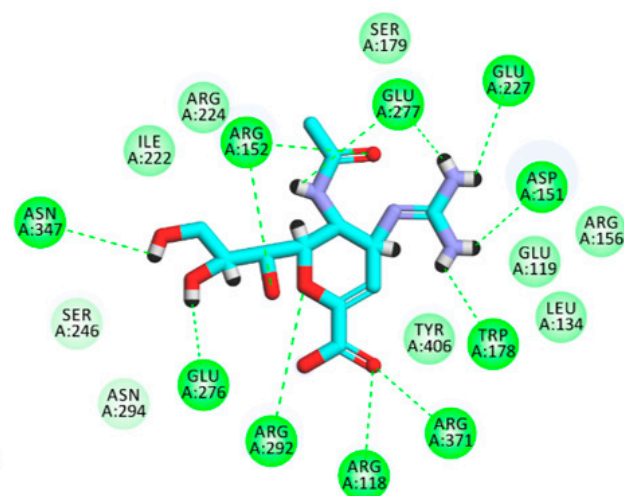
(b)



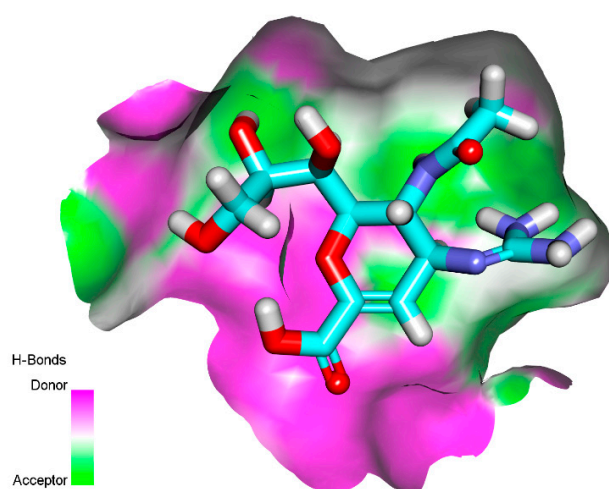
Supplementary Figure S4. (a) 3D of β -sitosterol-O-glucoside docked into the active site of influenza hemagglutinin H1 mutant DH1E. (b) 2D of β -sitosterol-O-glucoside docked into the active site of influenza hemagglutinin H1 mutant DH1E.



(a)

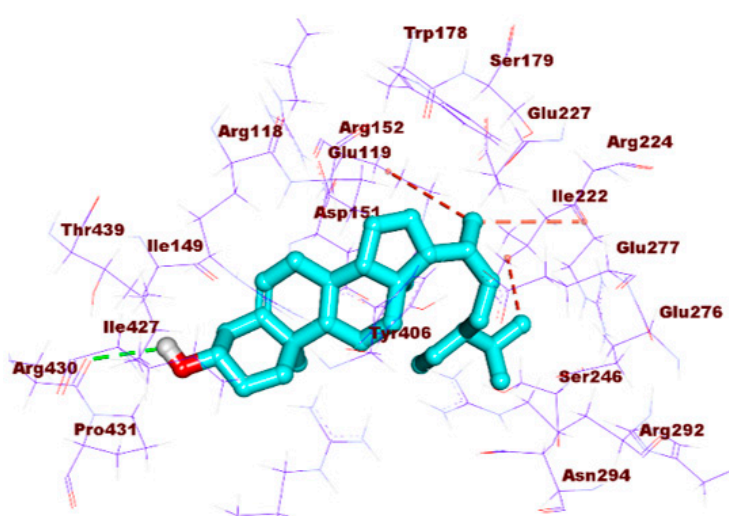


(b)

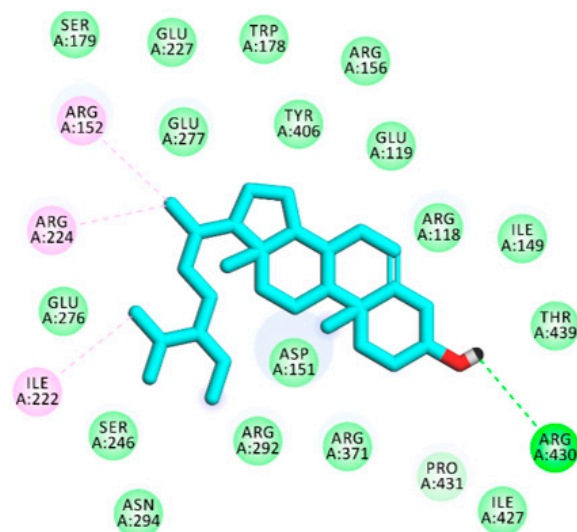


(c)

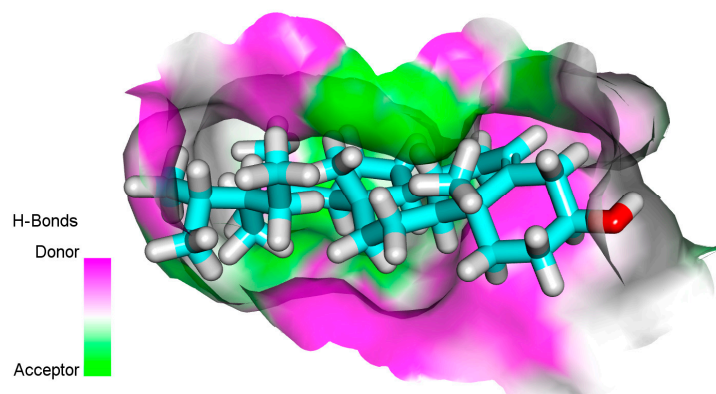
Supplementary Figure S5. (a) 3D of the co-crystallized ligand (Zanamivir) docked into the active site of influenza A/H1N1 neuraminidase (b) 2D of the co-crystallized ligand (Zanamivir) docked into the active site of influenza A/H1N1 neuraminidase. (c) Surface map of Zanamivir docked into the active site of influenza A/H1N1 neuraminidase.



(a)

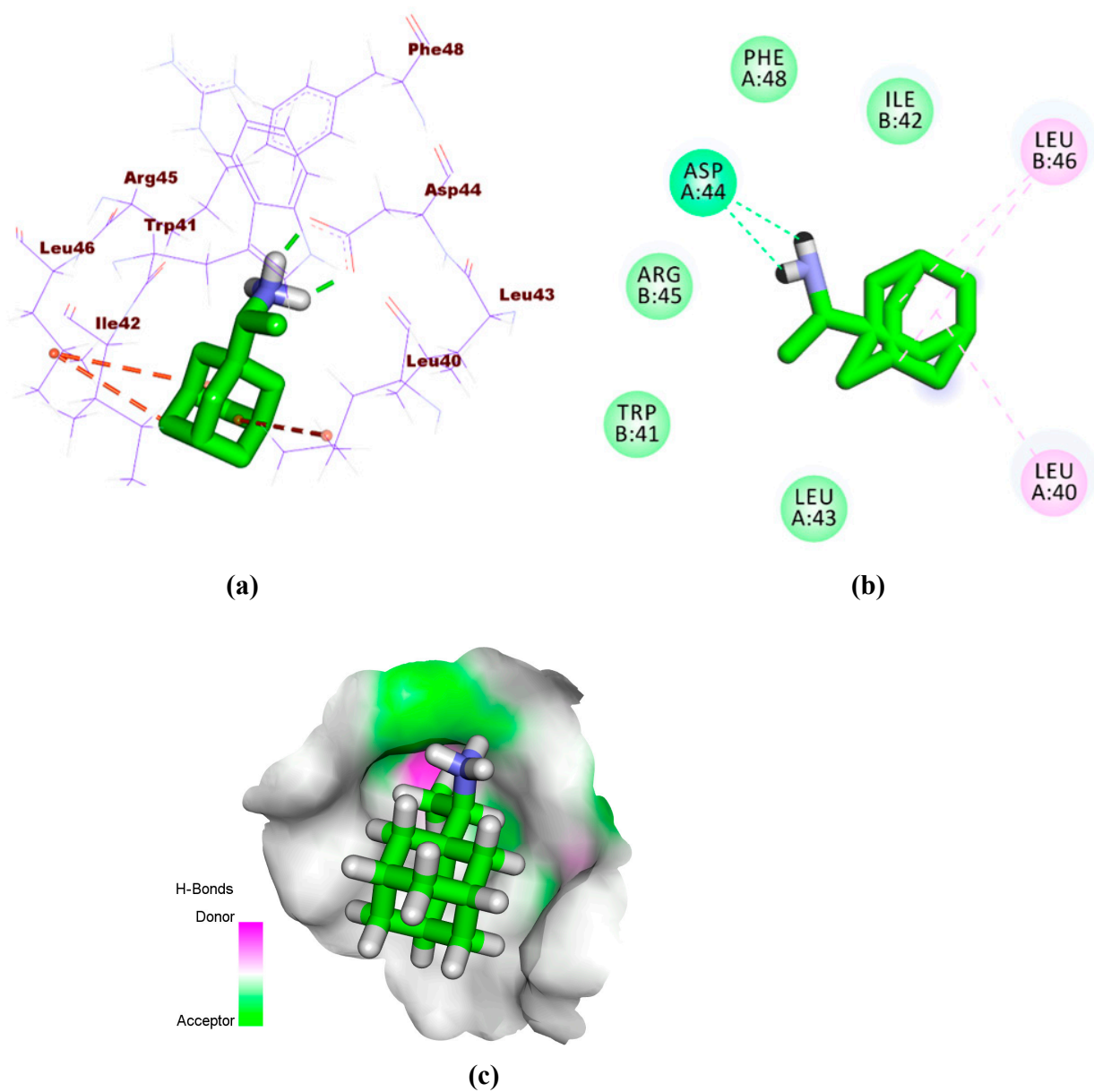


(b)

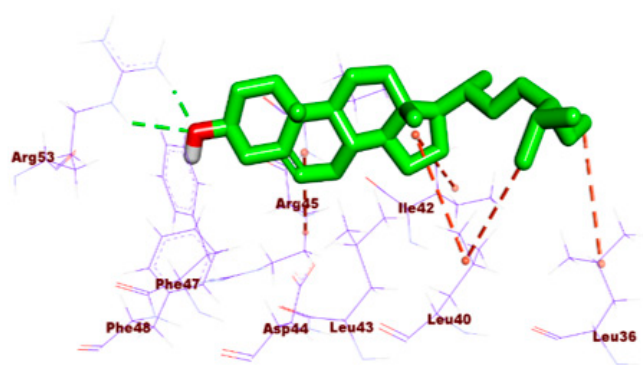


(c)

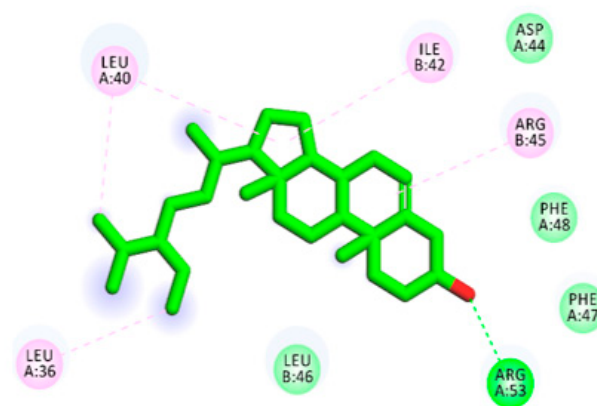
Supplementary Figure S6. (a) 3D of β -sitosterol docked into the active site of influenza A/H1N1 neuraminidase. (b) 2D of β -sitosterol docked into the active site of influenza A/H1N1 neuraminidase. (c) Surface map of β -sitosterol docked into the active site of influenza A/H1N1 neuraminidase.



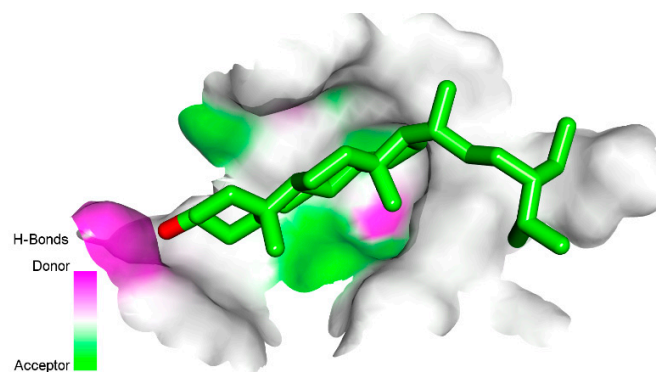
Supplementary Figure S7. (a) 3D of the co-crystallized ligand (Rimantadine) docked into the active site of influenza proton channel M2 protein. (b) 2D of the co-crystallized ligand (Rimantadine) docked into the active site of influenza proton channel M2 protein. (c) Surface map of Rimantadine docked into the active site of influenza proton channel M2 protein.



(a)

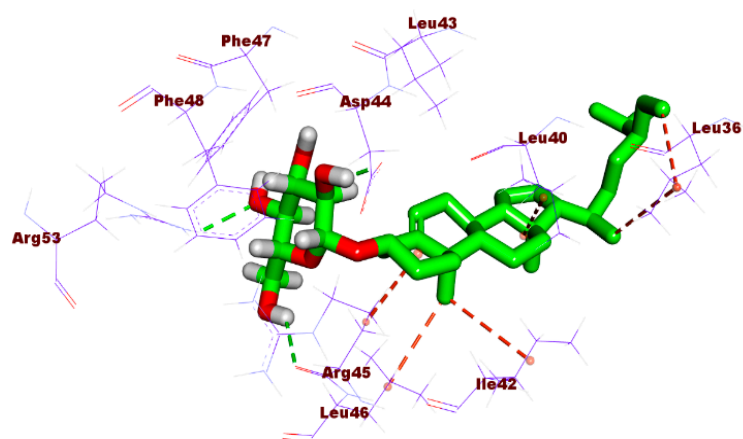


(b)

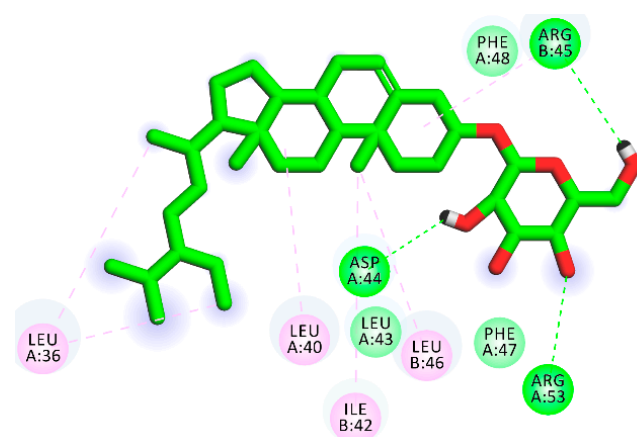


(c)

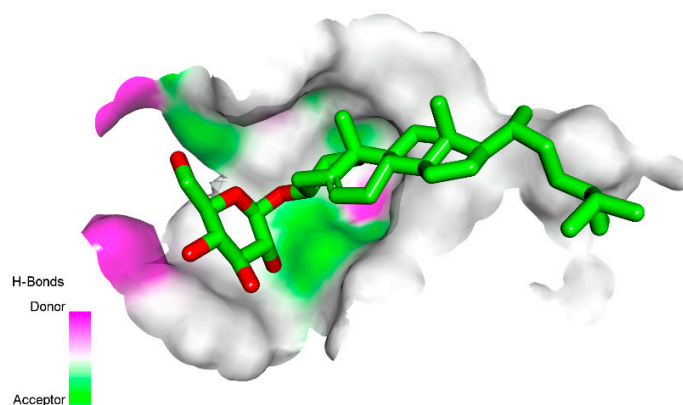
Supplementary Figure S8. (a) 3D of β -sitosterol docked into the active site of influenza proton channel M2 protein. (b) 2D of β -sitosterol docked into the active site of influenza proton channel M2 protein. (c) Surface map of β -sitosterol docked into the active site of influenza proton channel M2 protein.



(a)

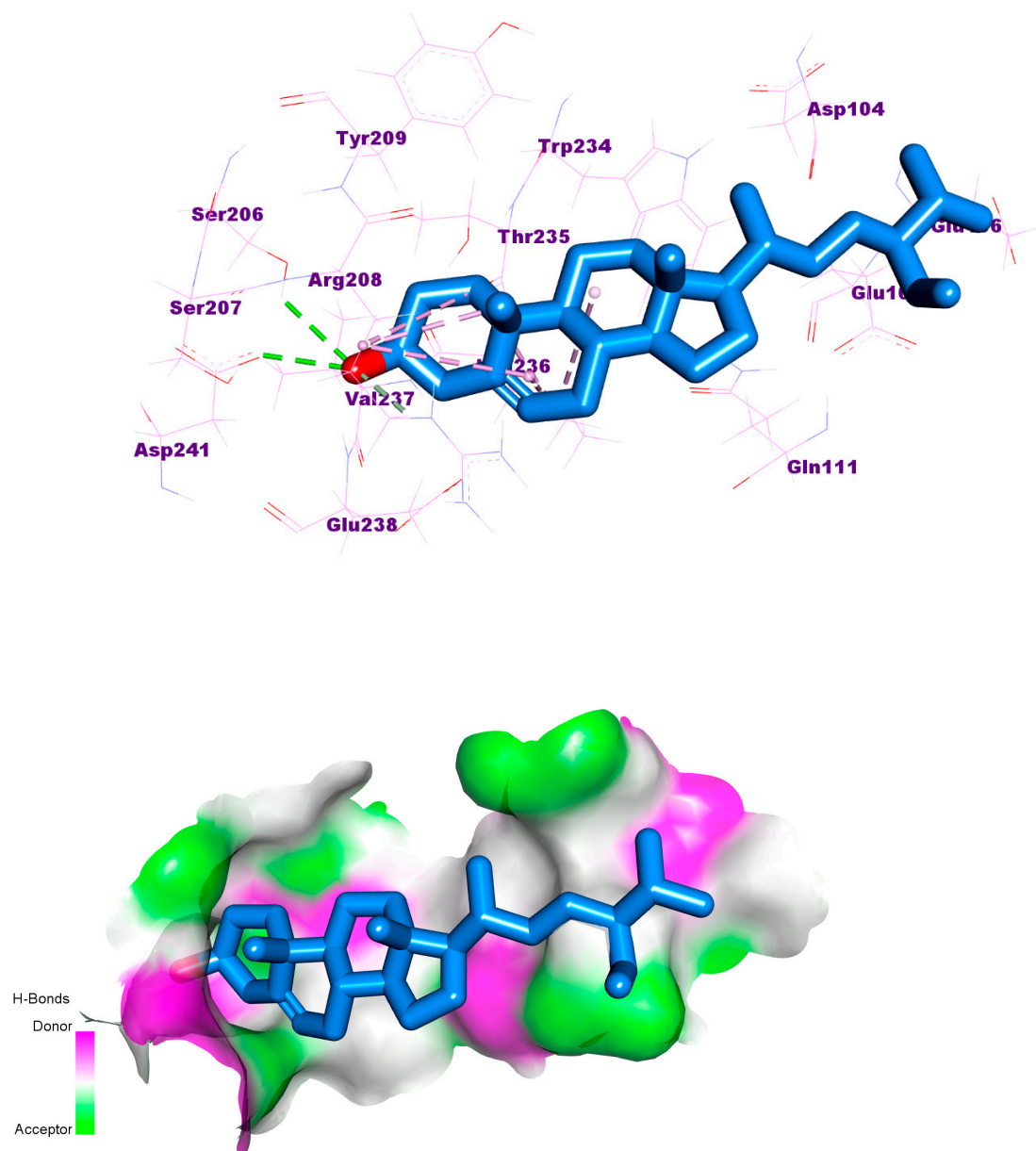


(b)

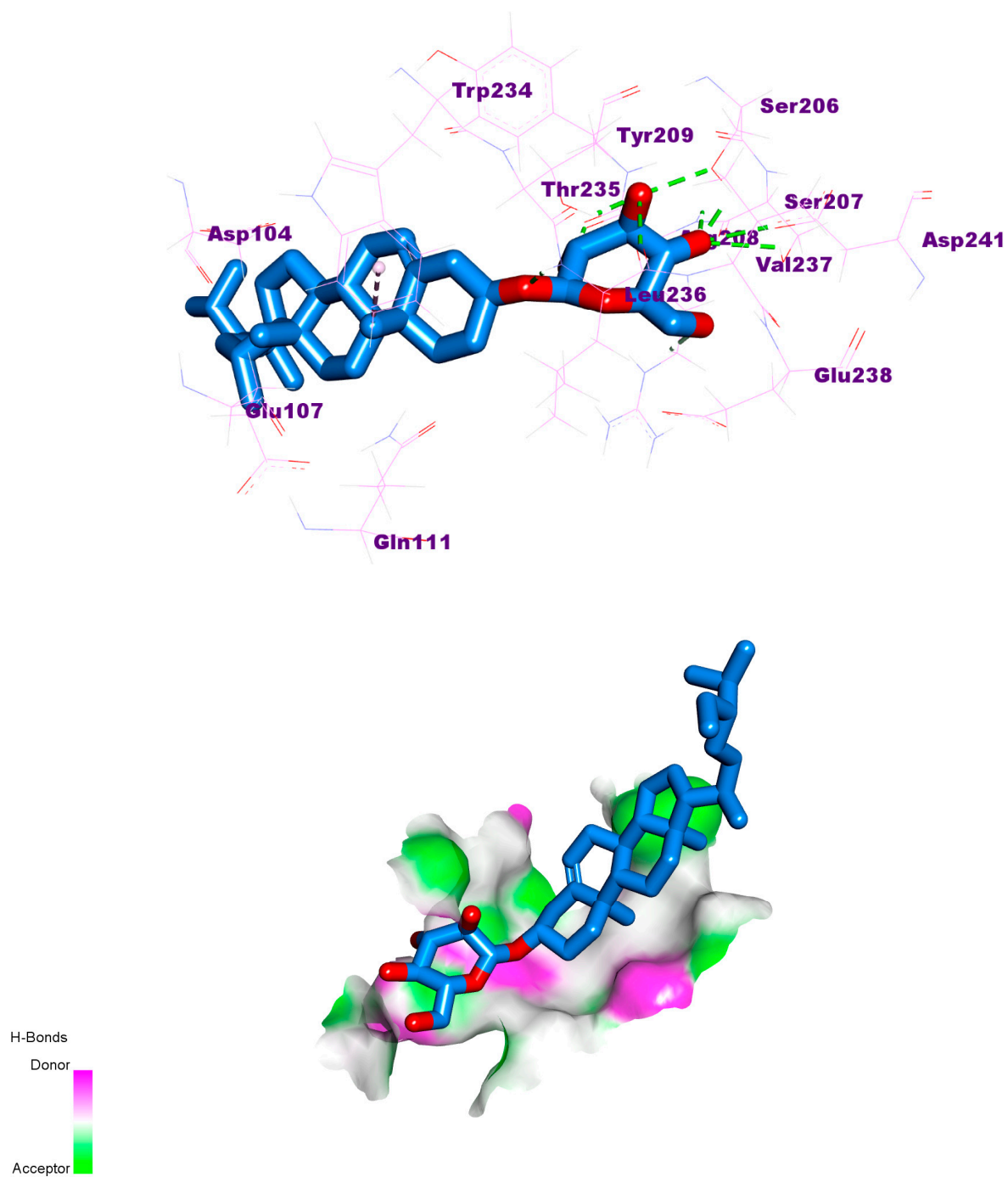


(c)

Supplementary Figure S9. (a) 3D of β -sitosterol-o-glucoside docked into the active site of influenza proton channel M2 protein. (b) 2D of β -sitosterol-O-glucoside docked into the active site of influenza proton channel M2 protein. (c) Surface map of β -sitosterol-o-glucoside docked into the active site of influenza proton channel M2 protein.



Supplementary Figure S10. 3D of β -sitosterol docked into hemagglutinin head epitope



Supplementary Figure S11: 3D of β -sitosterol-O-glucoside docked into hemagglutinin head epitope.