

1 **Investigating the Structure-Activity Relationship of Marine Natural**
2 **Polyketides as Promising SARS-CoV-2 Main Protease Inhibitors**

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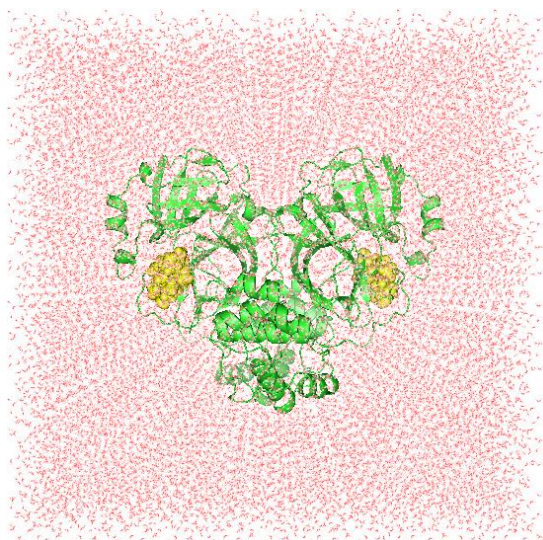
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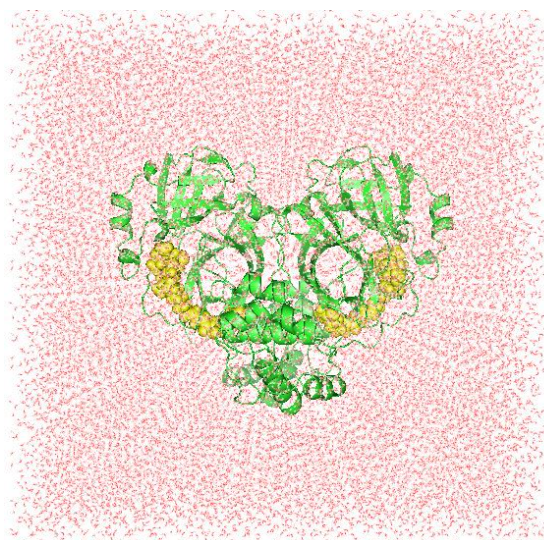
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18 **Figure S11.** Side-view of the full ligand-Mpro complexes embedded within the TIP3P system. (A)
19 D1; (B) D2; (C) D3; (D) D4; (E) D5; (F) O6K; (G) N3. Proteins are represented as cartoon coloured
20 green, ligand atoms are displayed as yellow spheres, while as TIP3P water molecules as lines. The
21 ions are hidden for clarity.

22 (A)



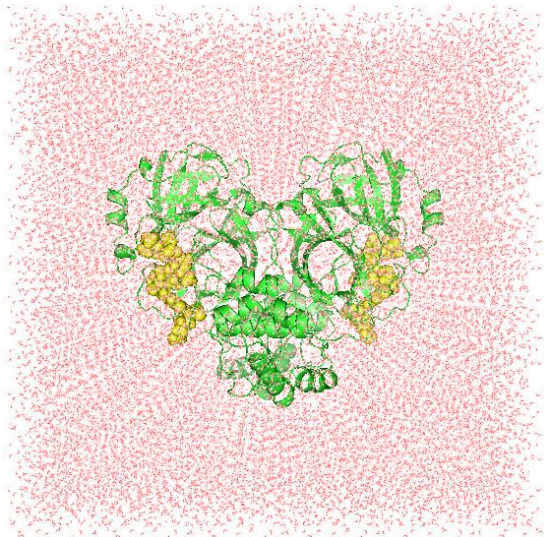
(B)



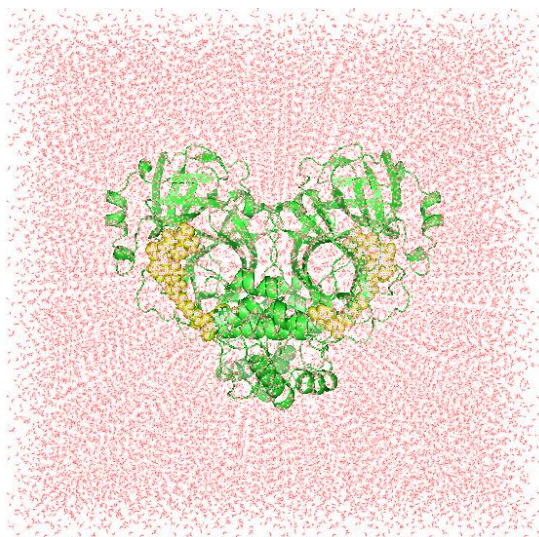
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25 (C)

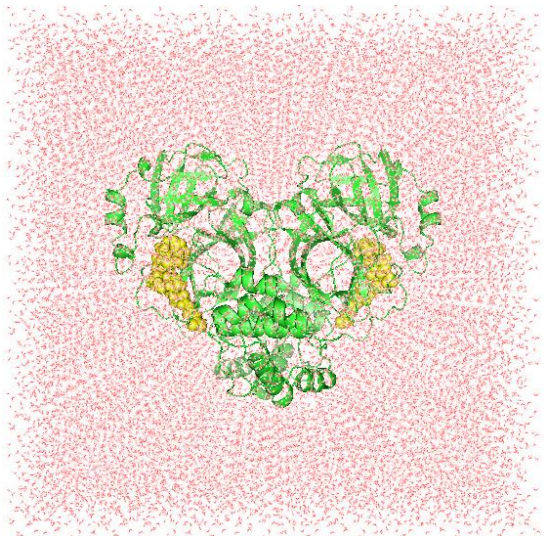


(D)

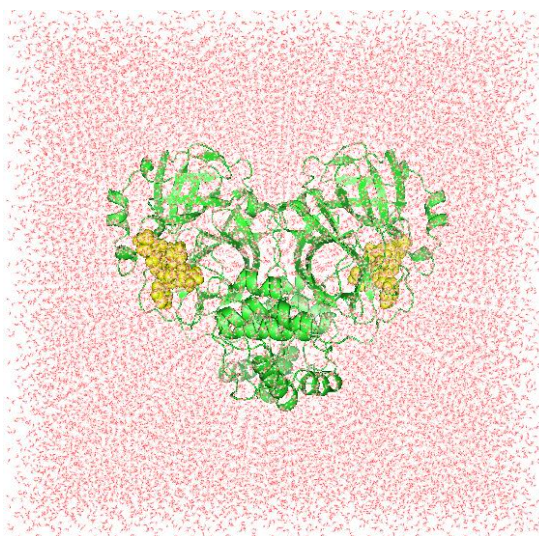


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27 (E)

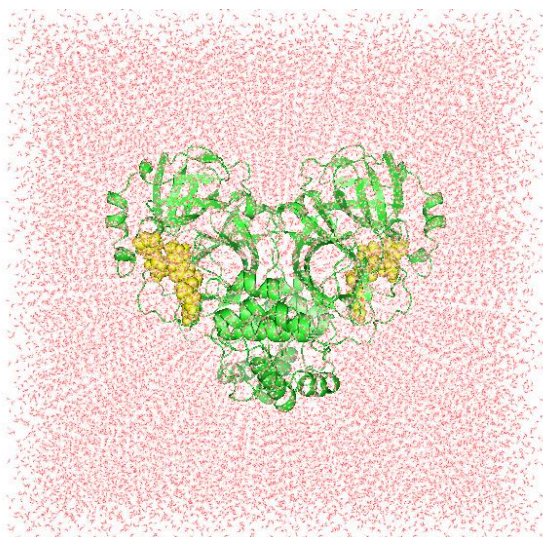


(F)



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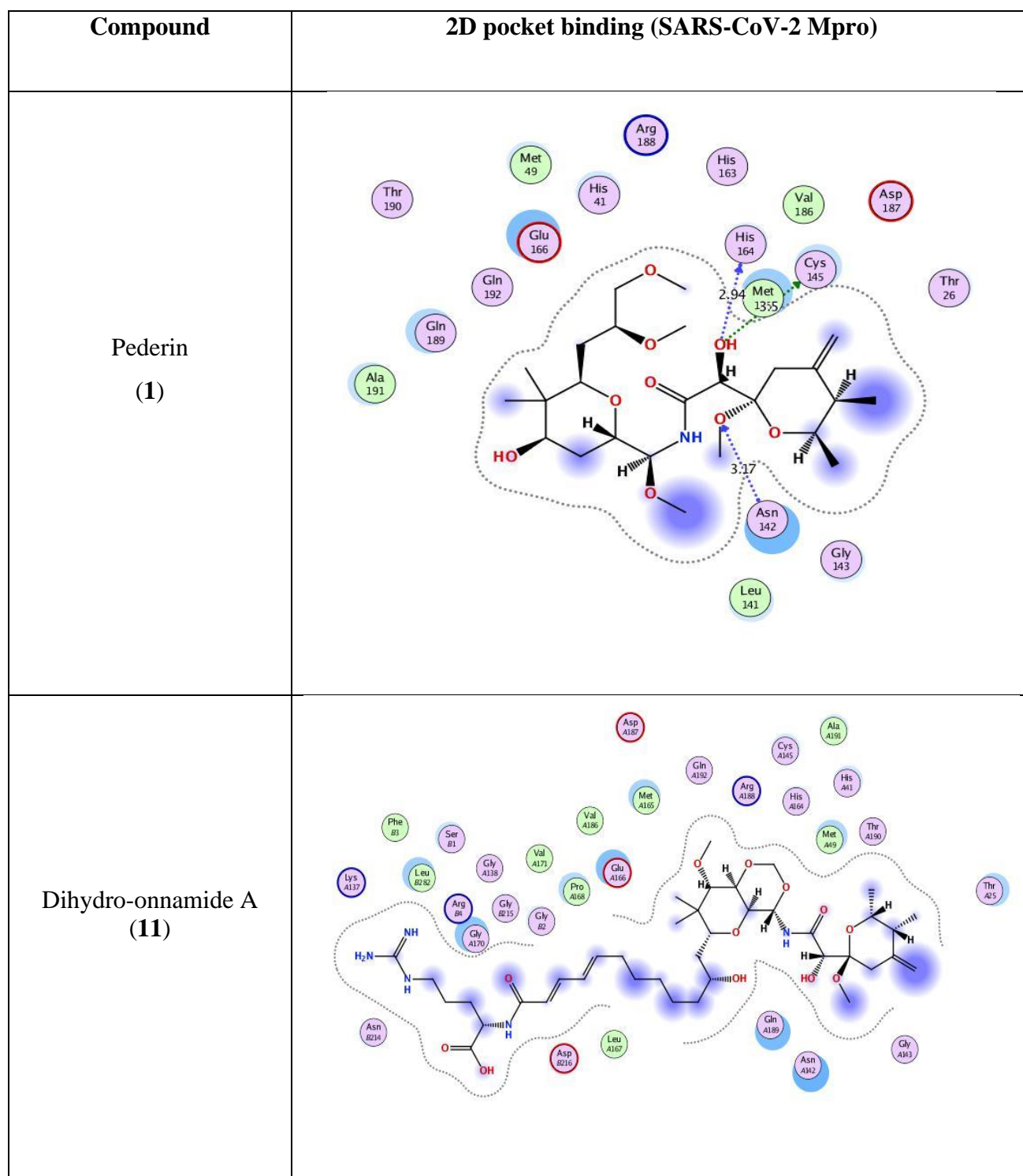
29 (G)



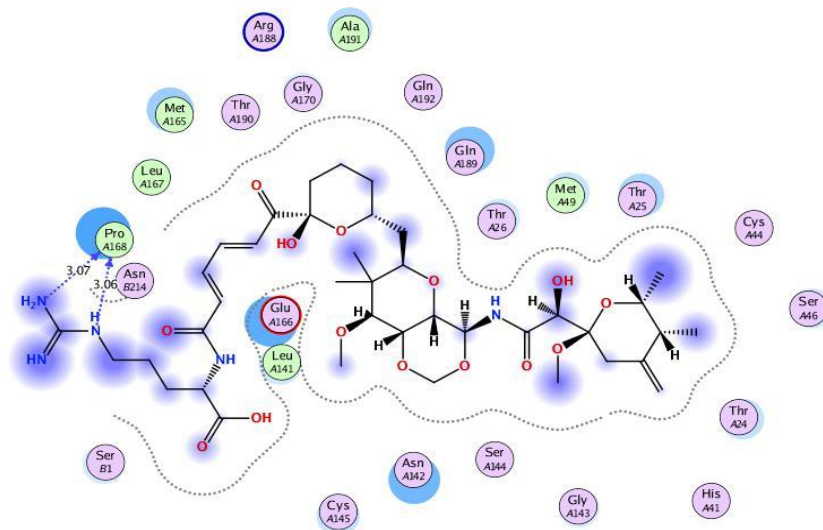
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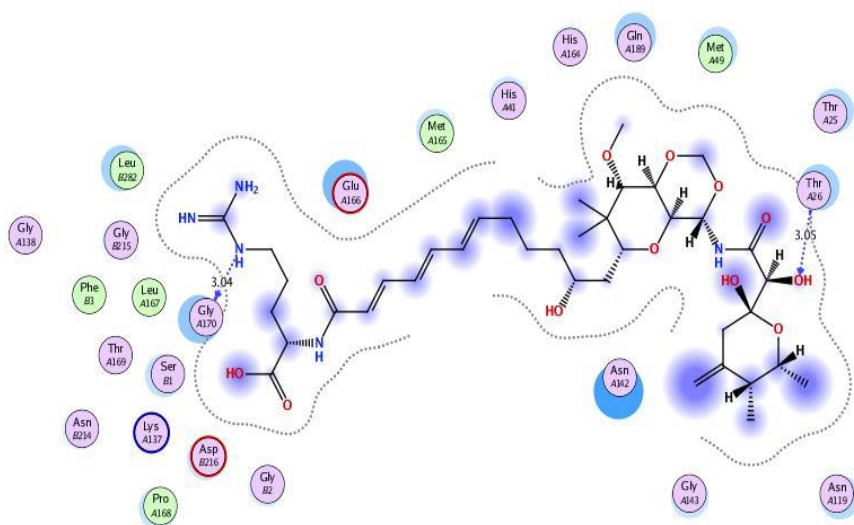
32 **Figure SI2.** 2D binding and positioning of the five examined marine products (**1**, **11**, **14**, **17**, and **29**)
 33 besides the docked co-crystallized inhibitors (**35** and **36**) towards the binding pocket of SARS-CoV-2
 34 Mpro.



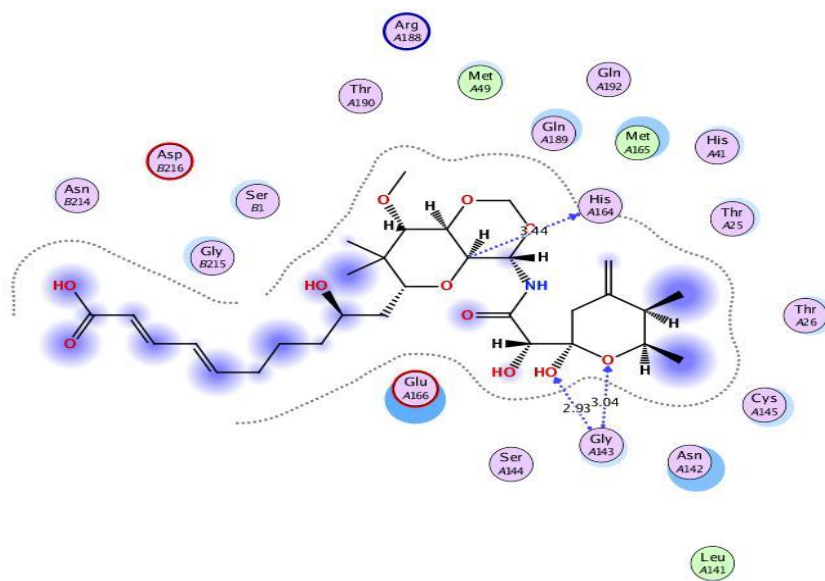
Onnamide C
(14)



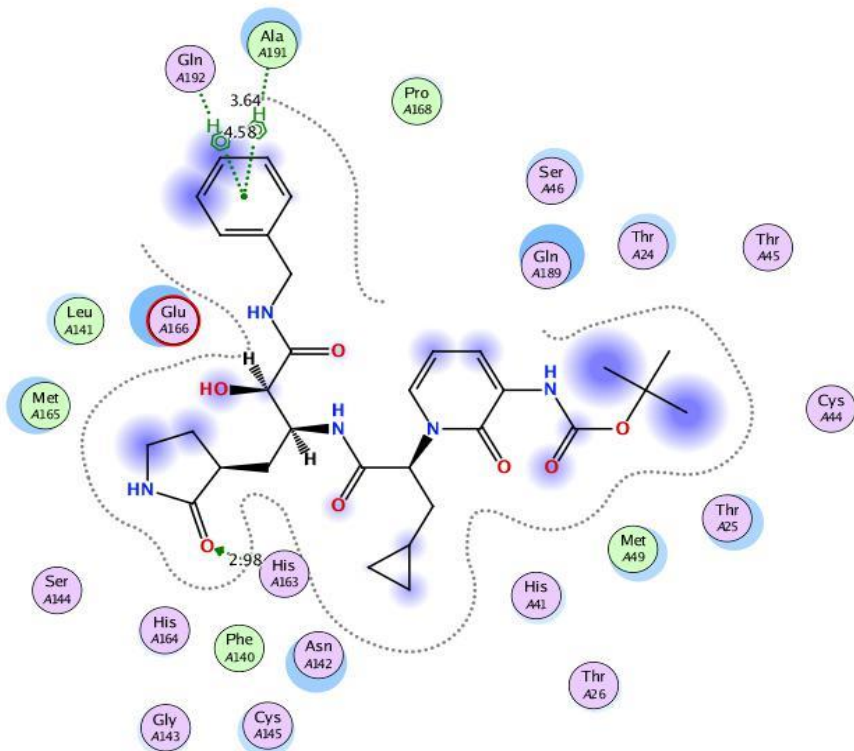
Pseudo-onnamide A
(17)



Theopederin G
(29)



6Y2G
co-crystallized inhibitor
(O6K, 35)



6LU7
co-crystallized inhibitor
(N3, 36)

