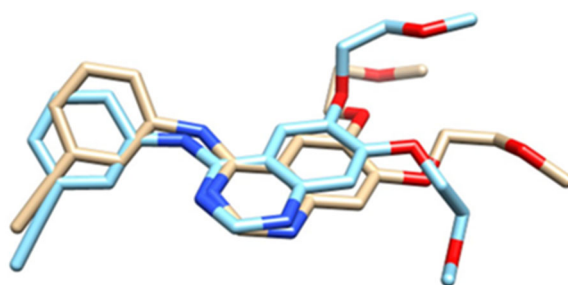
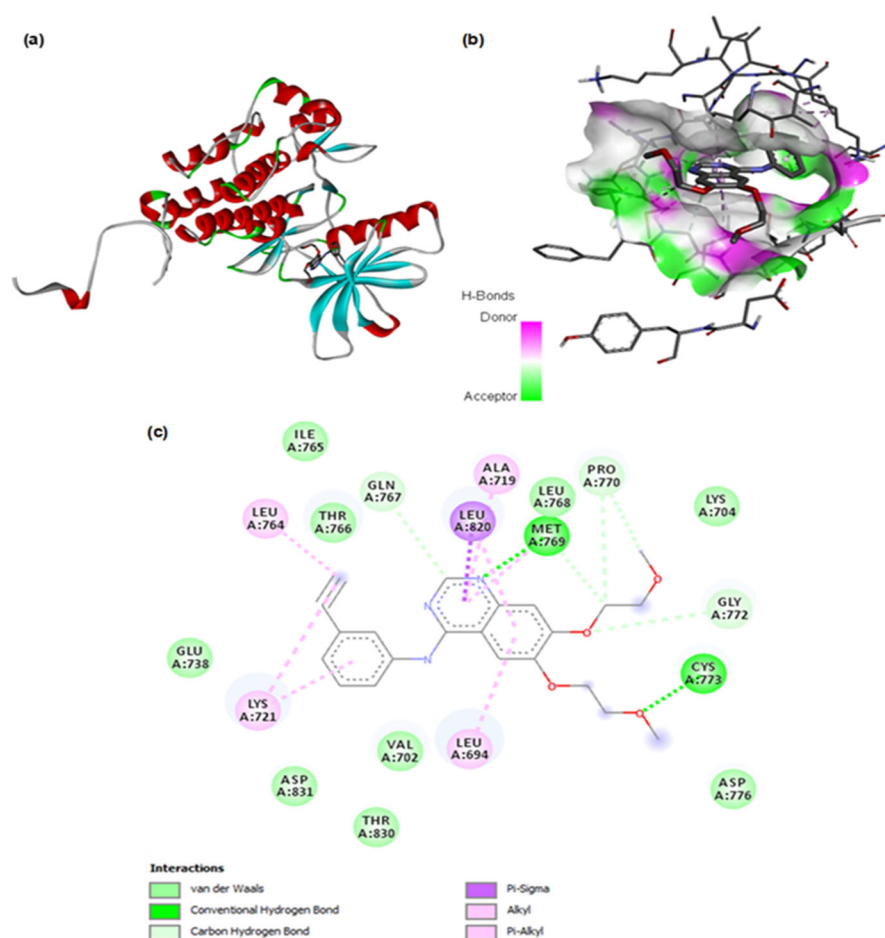


### Supplementary Data

This supplementary data is a part of a paper entitled “Molecular Docking and Molecular Dynamic Investigations of Xanthone-Chalcone Derivatives against Epidermal Growth Factor Receptor for Preliminary Discovery of Novel Anticancer Agent”.



**Fig S1.** The superimposed structures of the native ligand before (light-brown color) and after (light-blue color) redocking process in the active site of EGFR, in which the oxygen and nitrogen atoms are shown in red and dark blue color, respectively



**Fig S2.** Re-docking of the native ligand in the (a) whole structure and (b) active site of EGFR and (c) non-covalent interactions between native ligand and the active site of EGFR

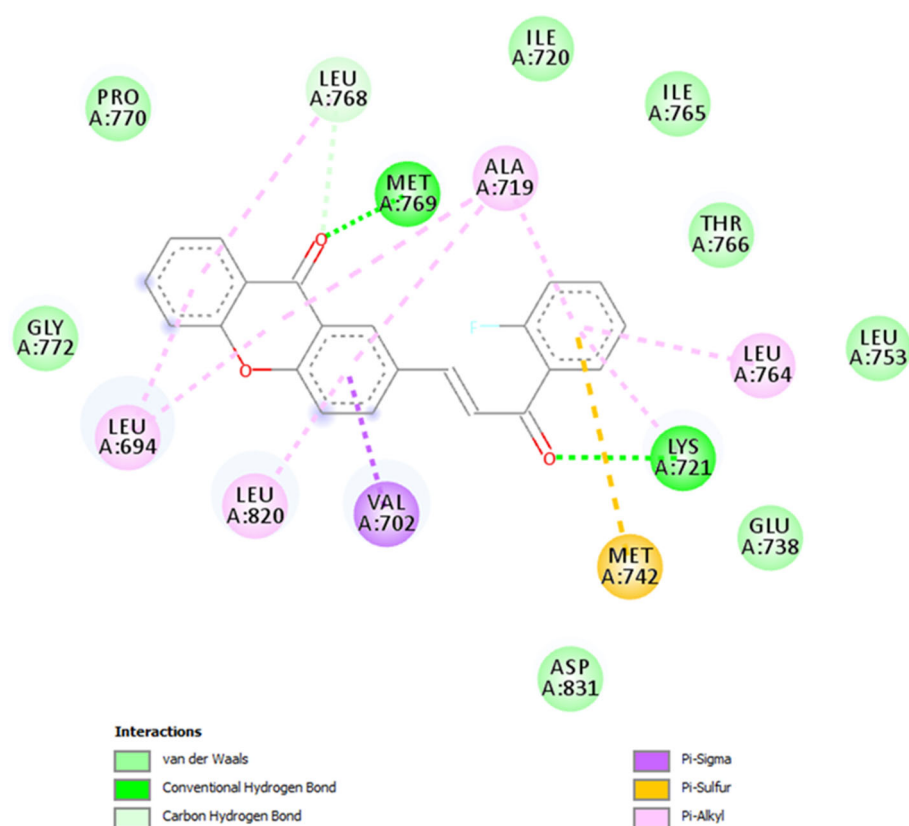


Fig S3. Non-covalent interactions between compound 2F and the active site of EGFR

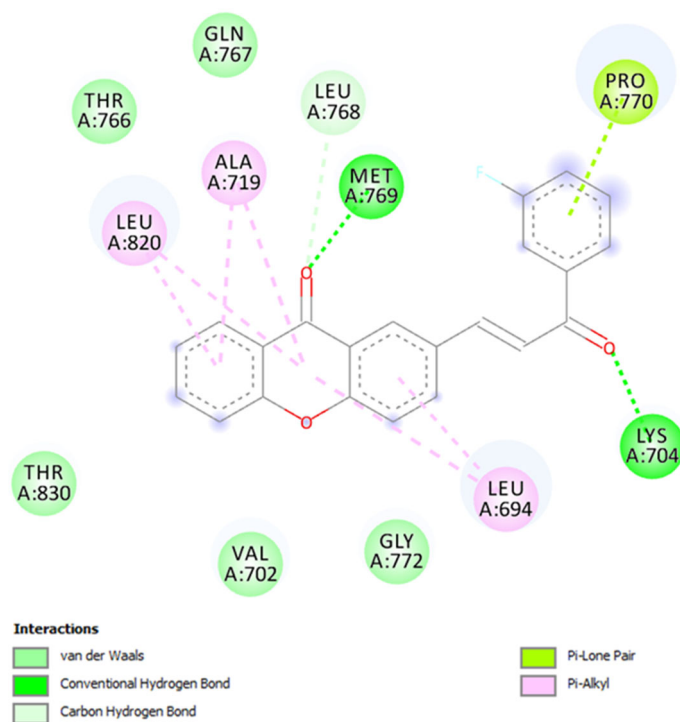


Fig S4. Non-covalent interactions between compound 3F and the active site of EGFR

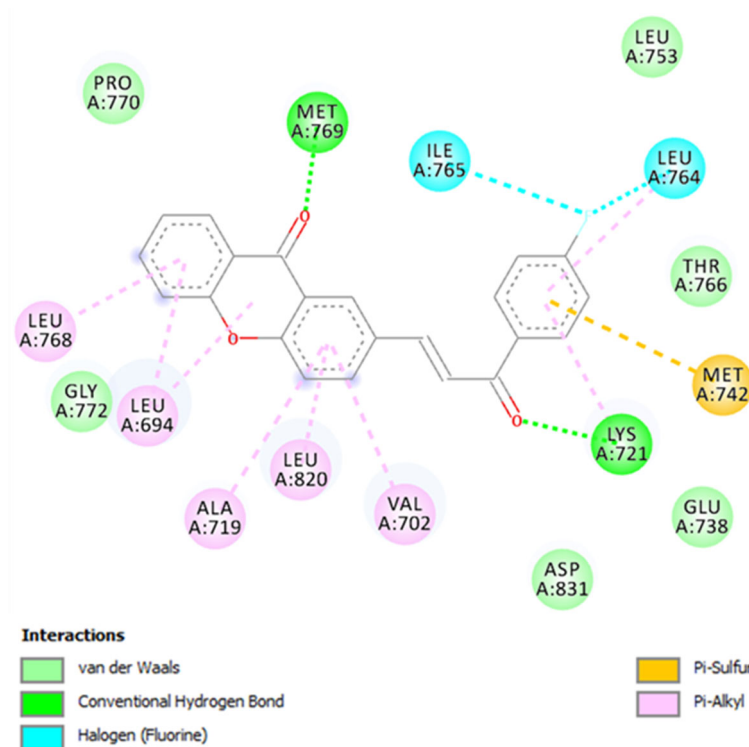


Fig S5. Non-covalent interactions between compound 4F and the active site of EGFR

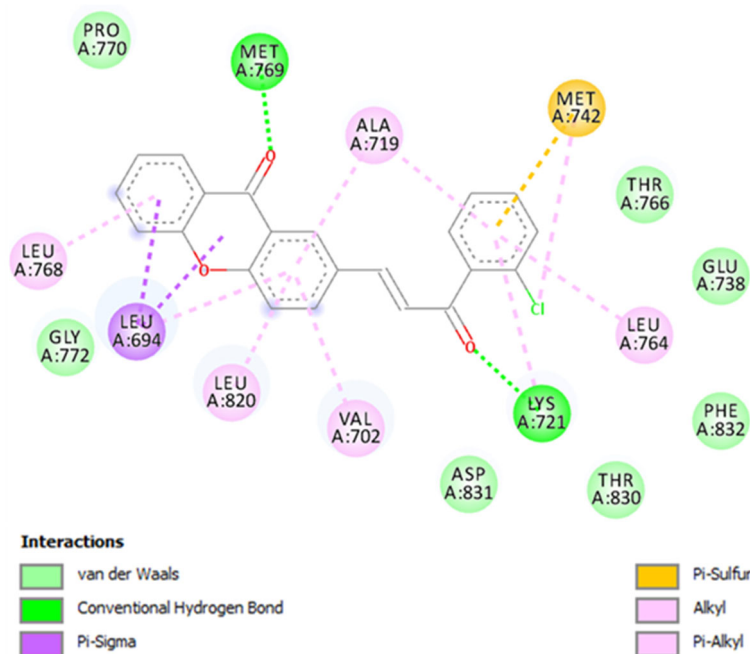


Fig S6. Non-covalent interactions between compound 2Cl and the active site of EGFR

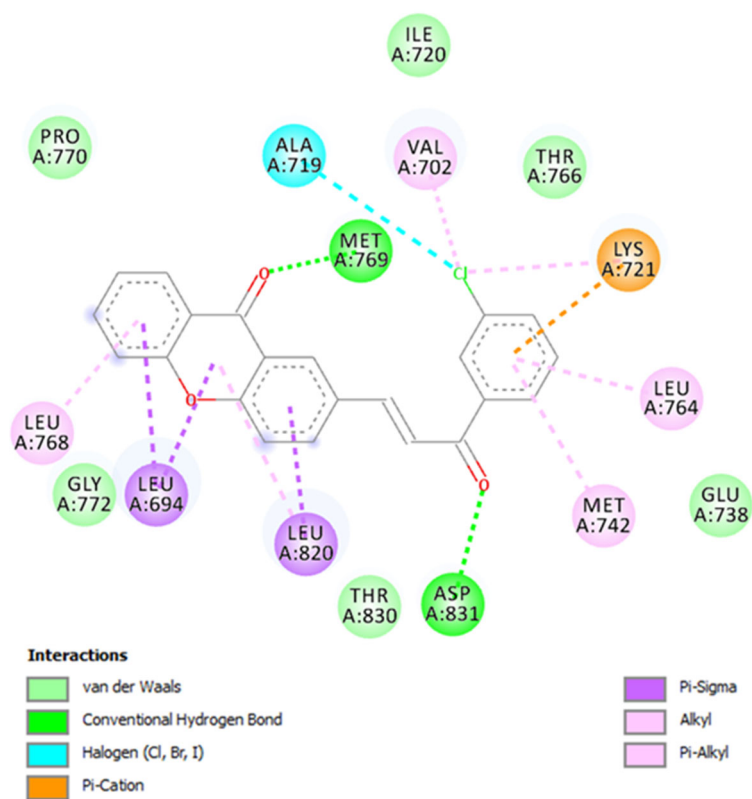


Fig S7. Non-covalent interactions between compound 3Cl and the active site of EGFR

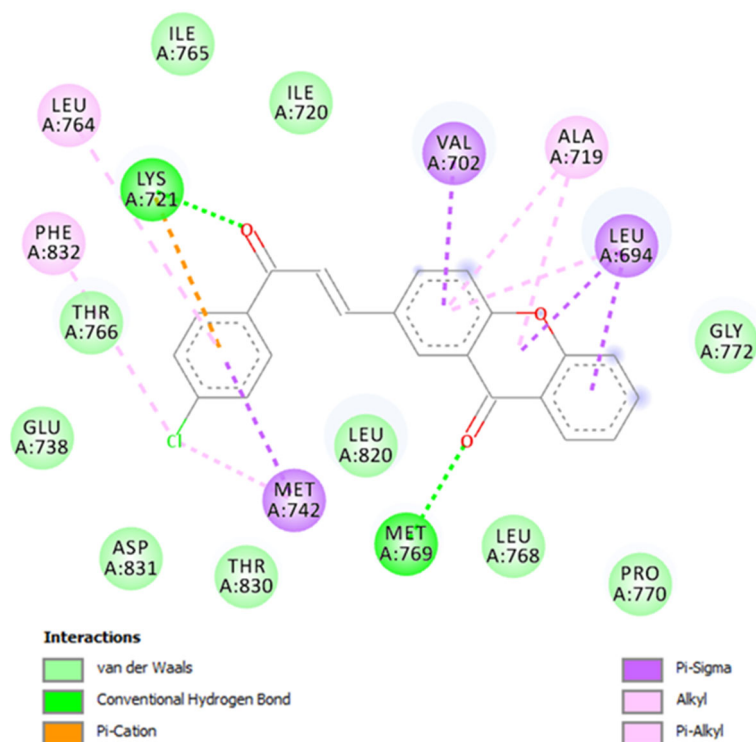
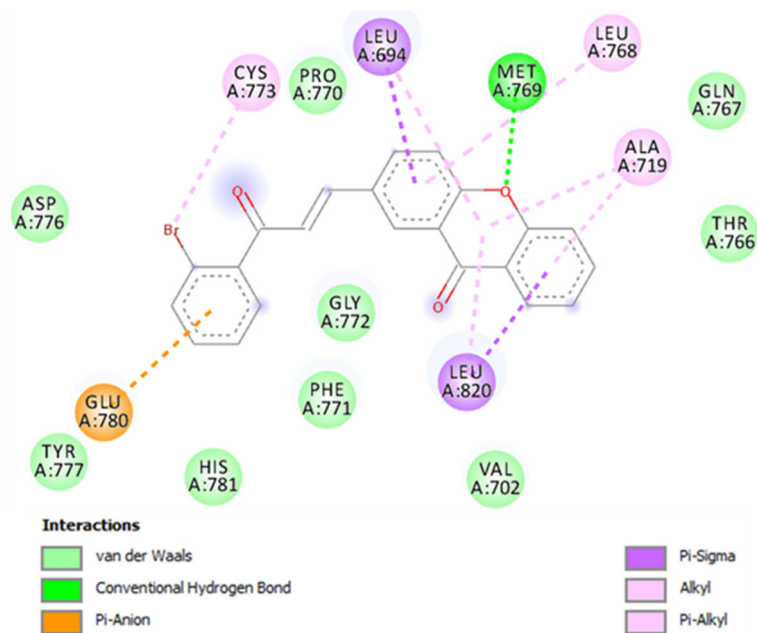
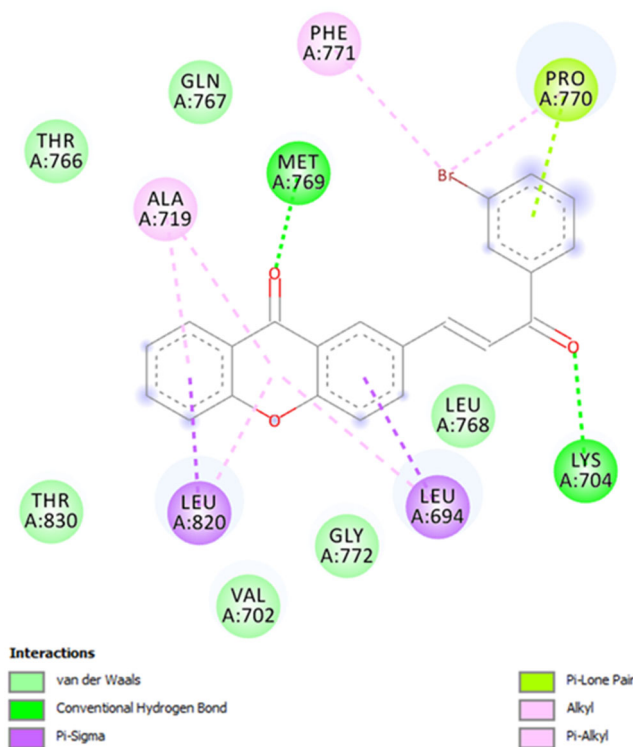


Fig S8. Non-covalent interactions between compound 4Cl and the active site of EGFR



**Fig S9.** Non-covalent interactions between compound 2Br and the active site of EGFR



**Fig S10.** Non-covalent interactions between compound 3Br and the active site of EGFR

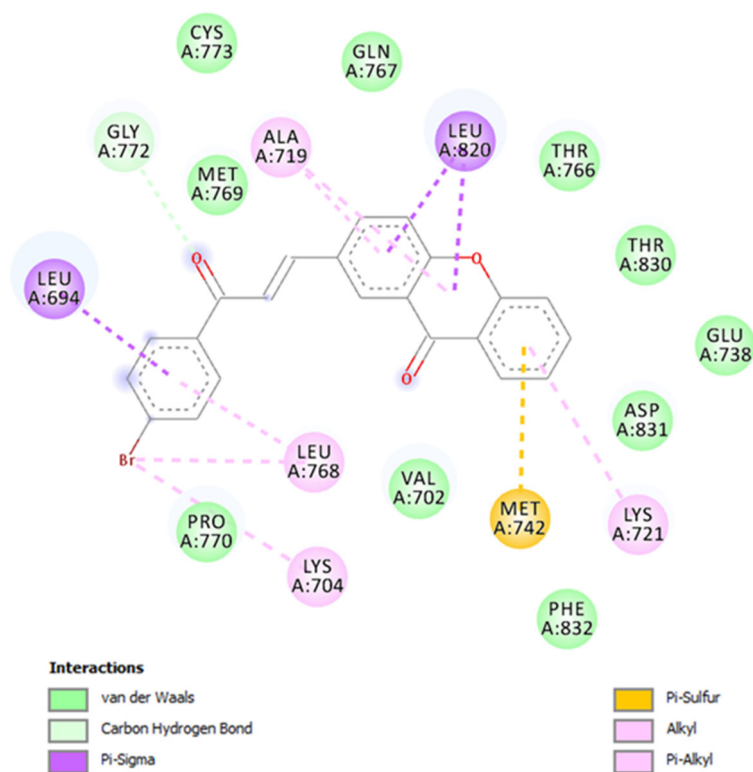


Fig S11. Non-covalent interactions between compound 4Br and the active site of EGFR

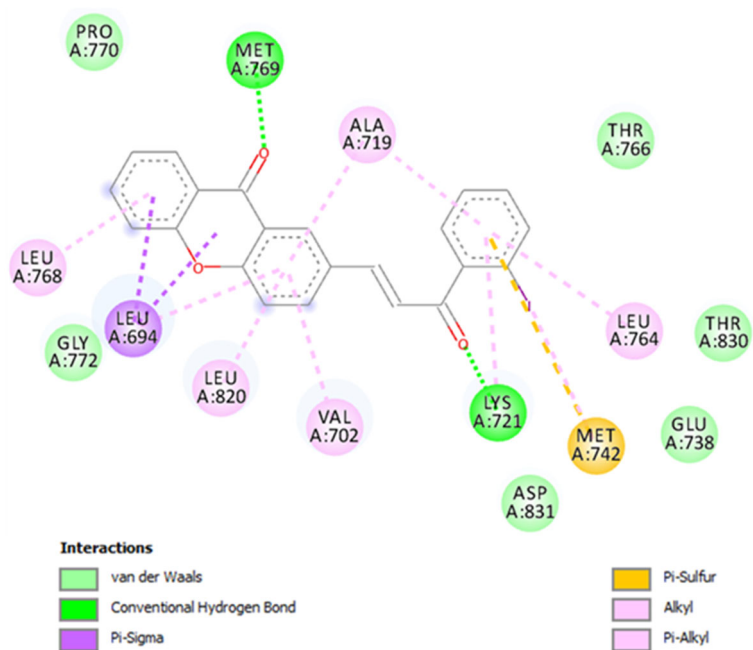


Fig S12. Non-covalent interactions between compound 2I and the active site of EGFR

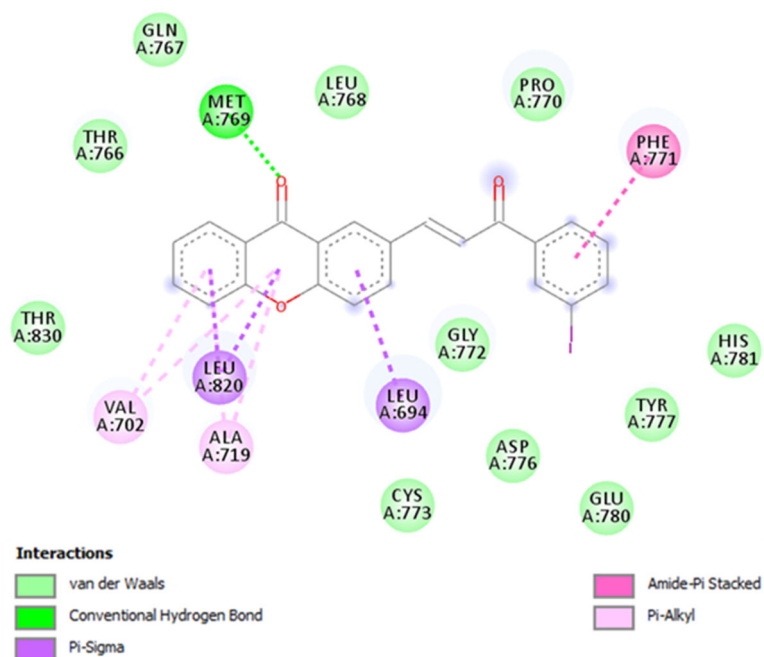


Fig S13. Non-covalent interactions between compound 3I and the active site of EGFR

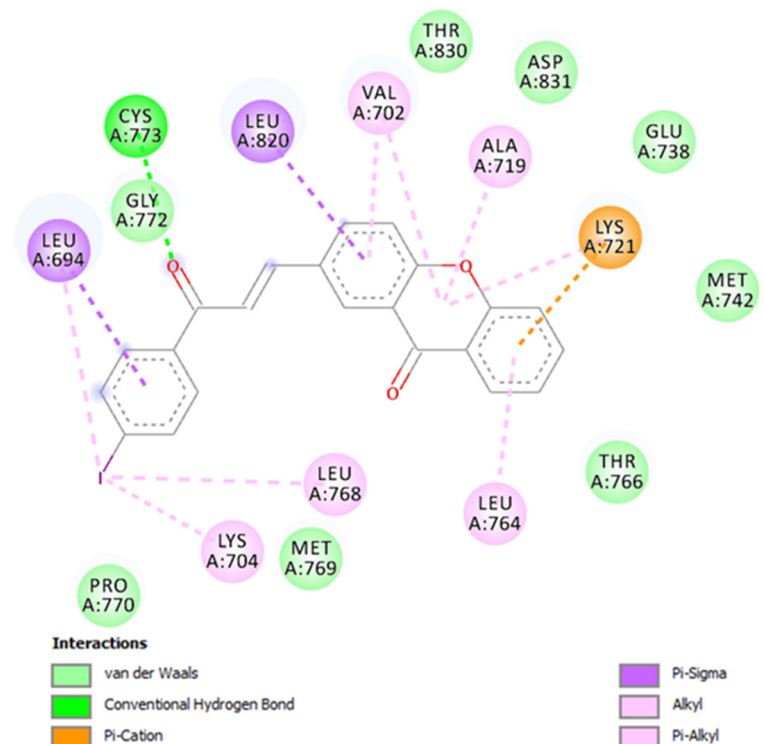


Fig S14. Non-covalent interactions between compound 4I and the active site of EGFR

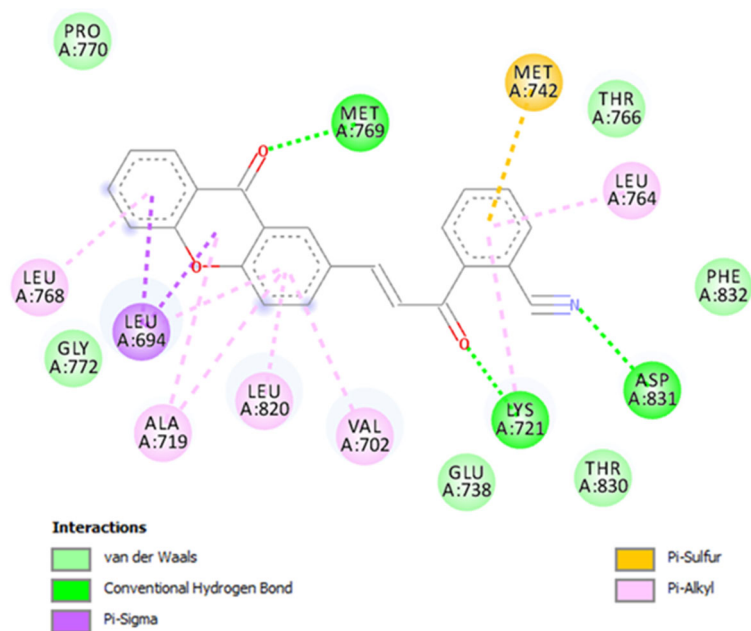


Fig S15. Non-covalent interactions between compound 2CN and the active site of EGFR

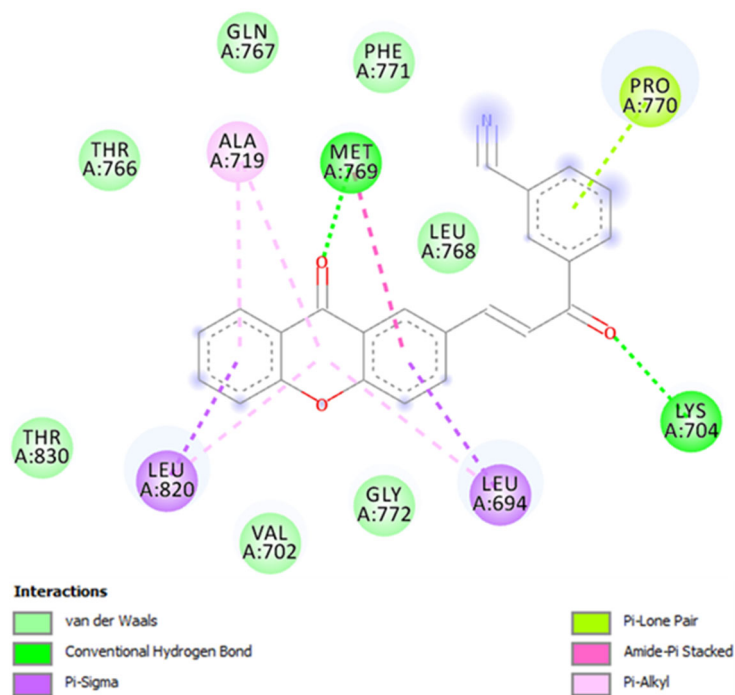


Fig S16. Non-covalent interactions between compound 3CN and the active site of EGFR



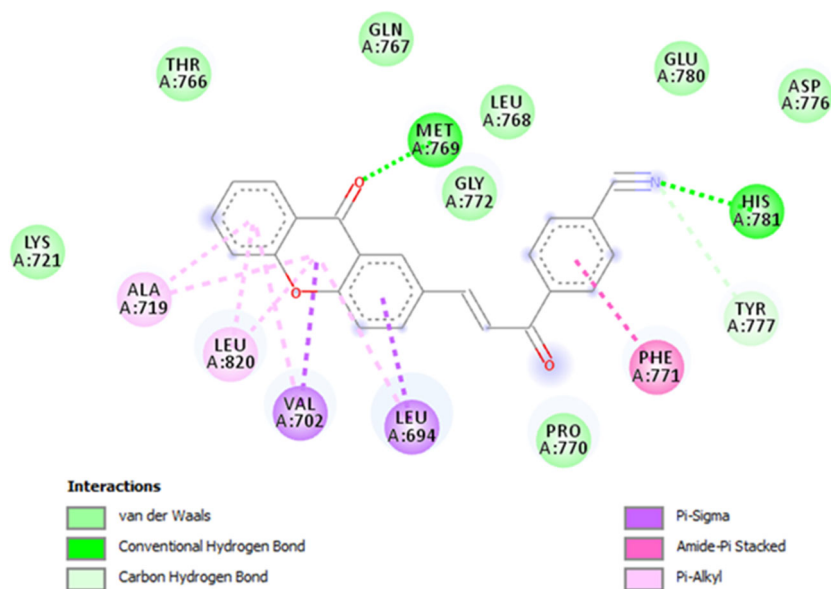


Fig S17. Non-covalent interactions between compound 4CN and the active site of EGFR

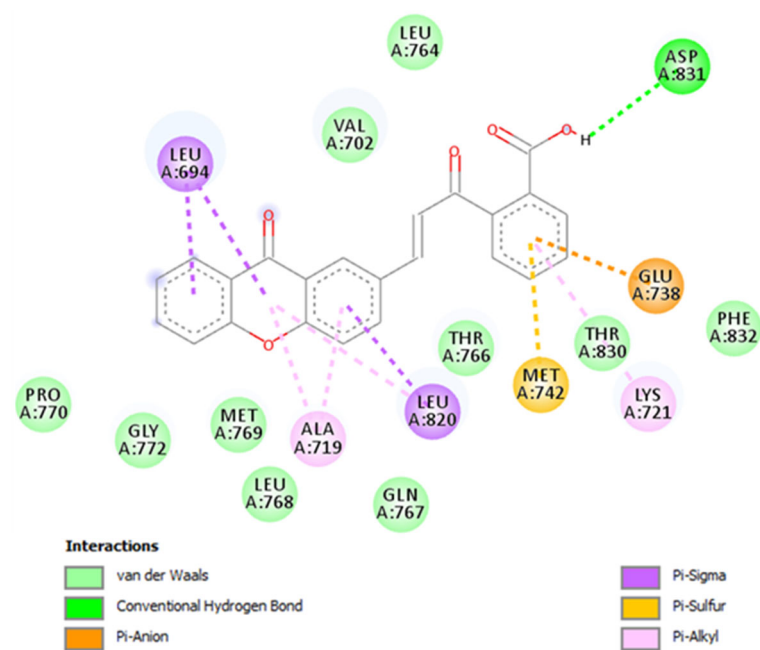
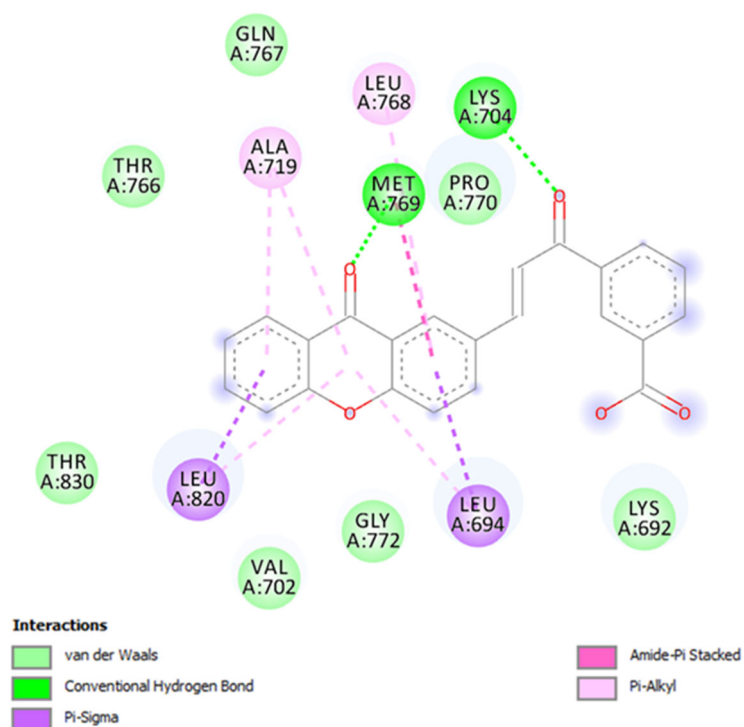
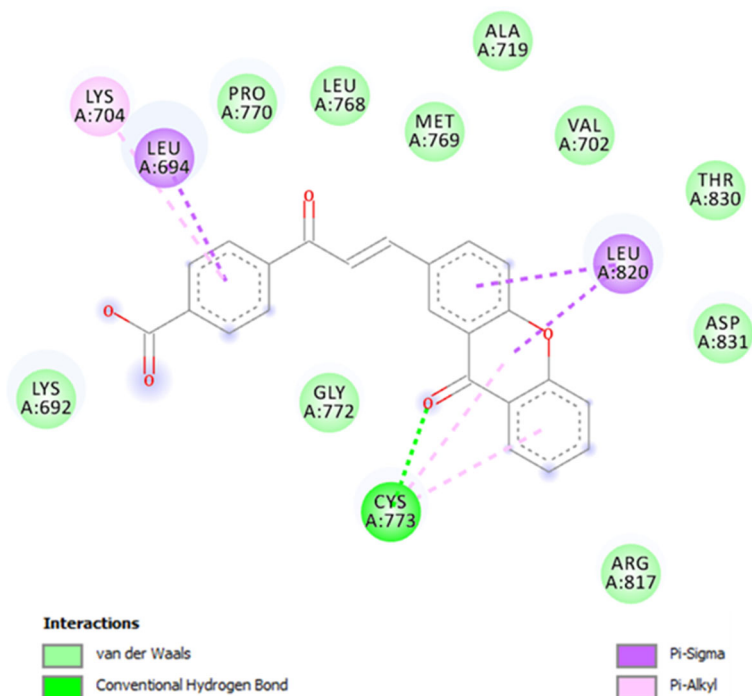


Fig S18. Non-covalent interactions between compound 2CO<sub>2</sub>H and the active site of EGFR

Fig S19. Non-covalent interactions between compound 3CO<sub>2</sub>H and the active site of EGFRFig S20. Non-covalent interactions between compound 4CO<sub>2</sub>H and the active site of EGFR

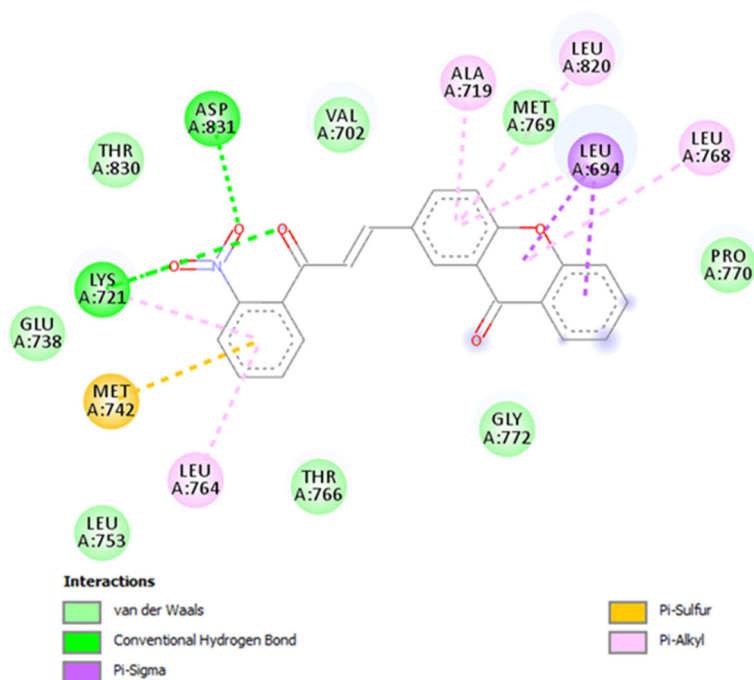


Fig S21. Non-covalent interactions between compound 2NO<sub>2</sub> and the active site of EGFR

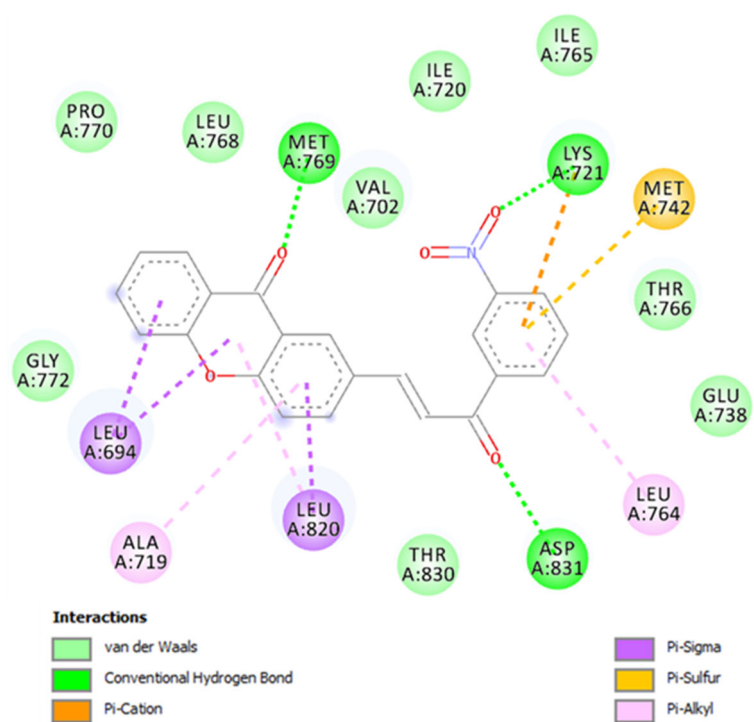


Fig S22. Non-covalent interactions between compound 3NO<sub>2</sub> and the active site of EGFR

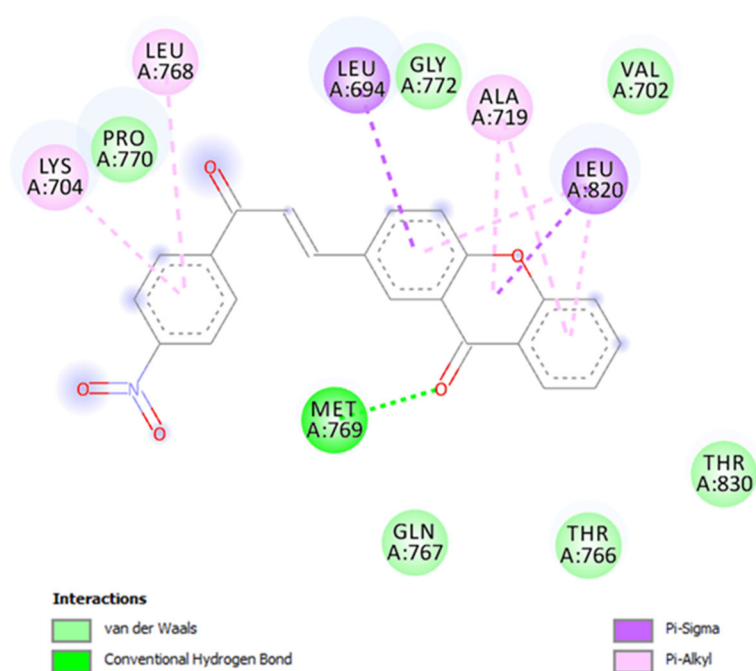


Fig S23. Non-covalent interactions between compound 4NO<sub>2</sub> and the active site of EGFR

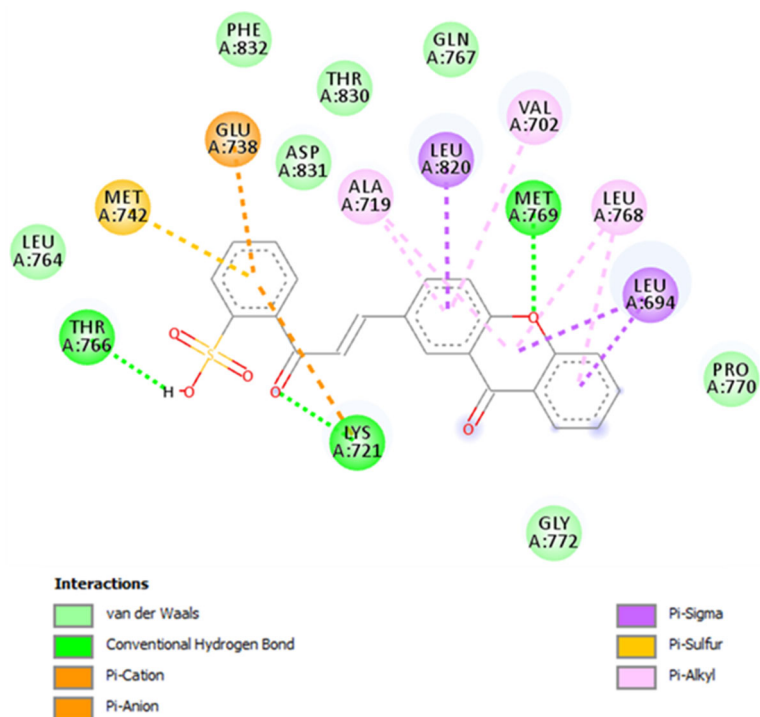


Fig S24. Non-covalent interactions between compound 2SO<sub>3</sub>H and the active site of EGFR

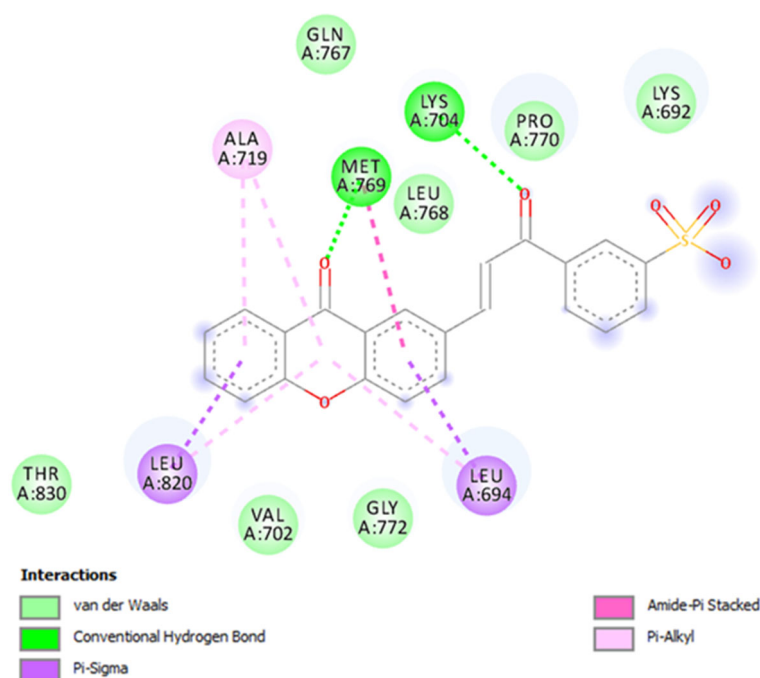


Fig S25. Non-covalent interactions between compound 3SO<sub>3</sub>H and the active site of EGFR

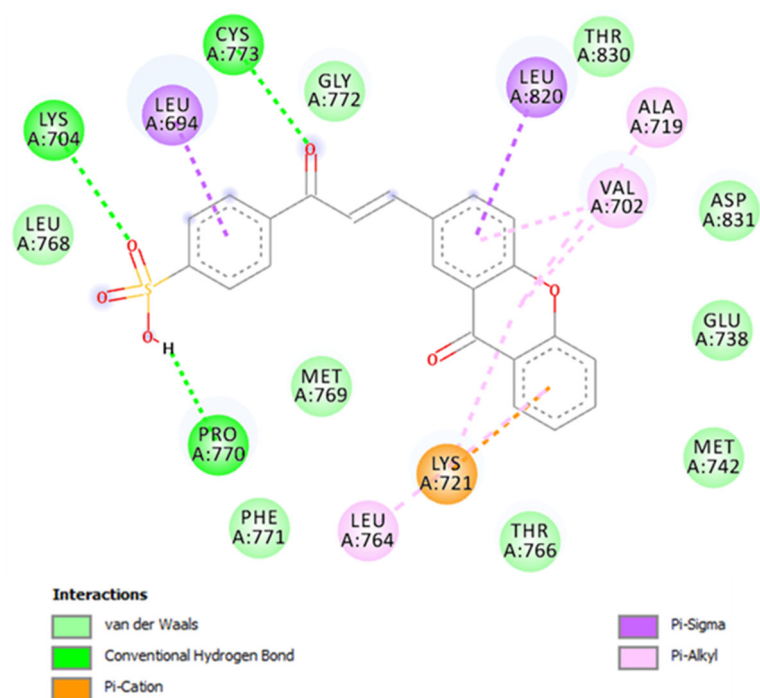


Fig S26. Non-covalent interactions between compound 4SO<sub>3</sub>H and the active site of EGFR

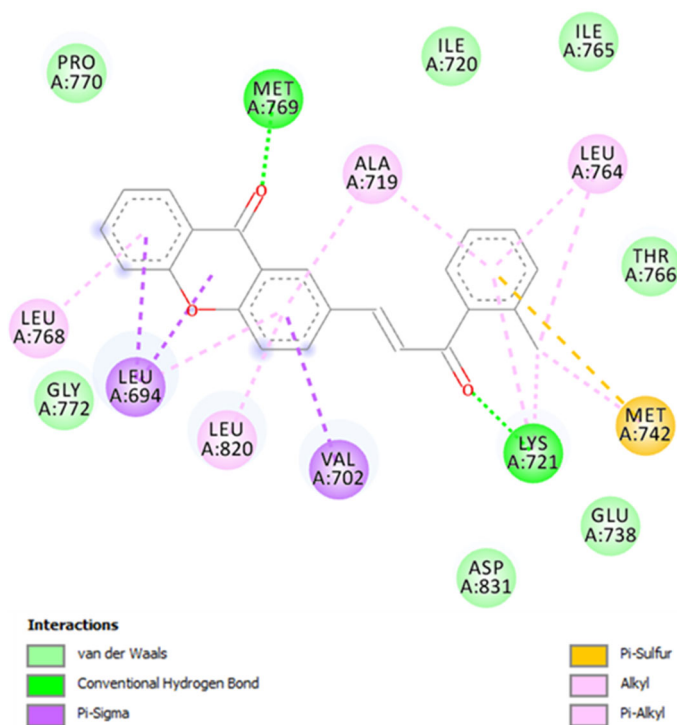


Fig S27. Non-covalent interactions between compound 2CH<sub>3</sub> and the active site of EGFR

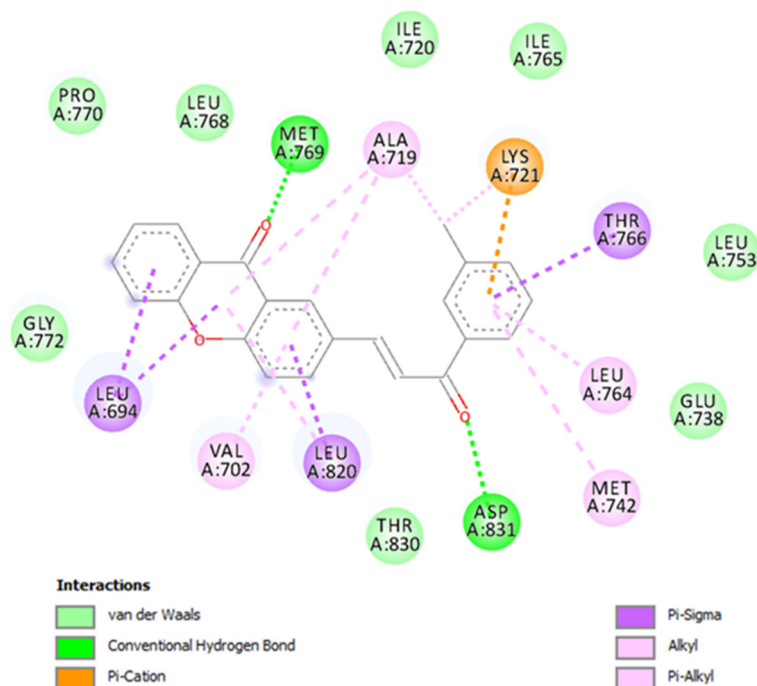


Fig S28. Non-covalent interactions between compound 3CH<sub>3</sub> and the active site of EGFR

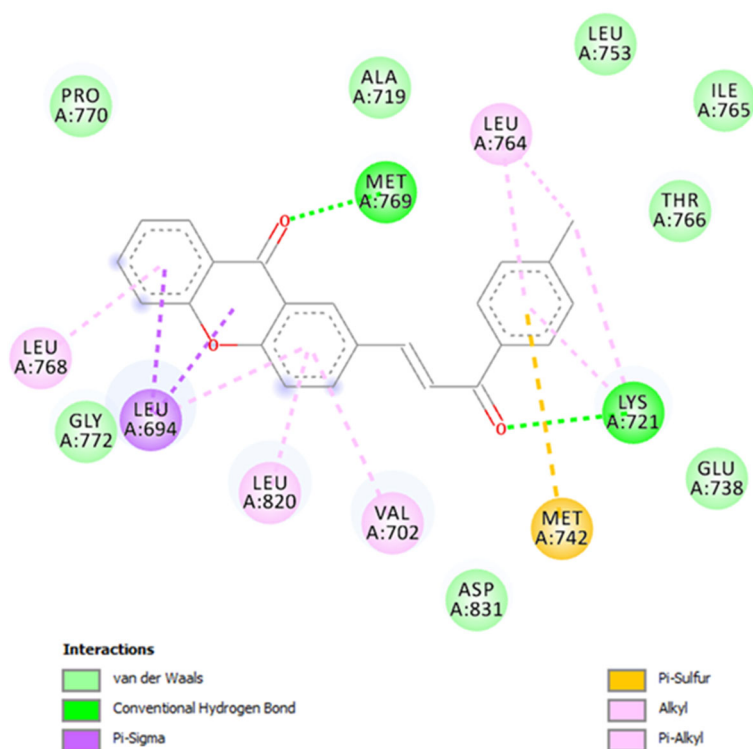


Fig S29. Non-covalent interactions between compound 4CH<sub>3</sub> and the active site of EGFR

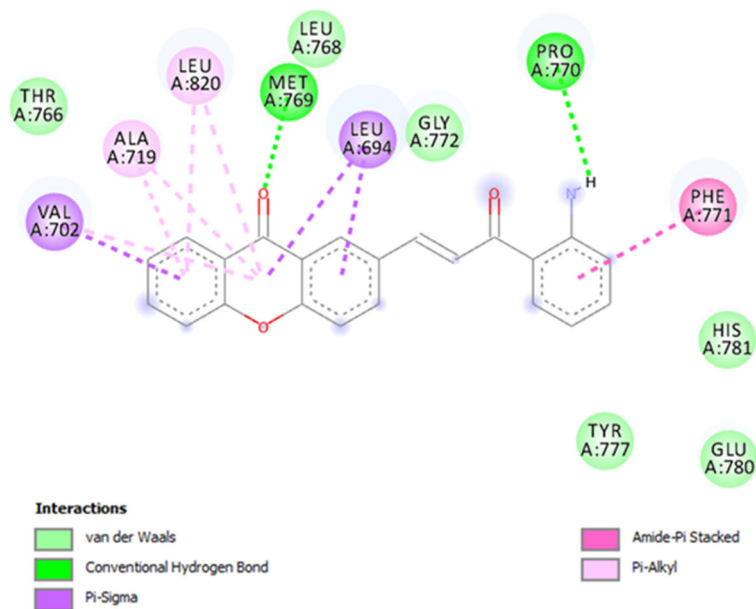


Fig S30. Non-covalent interactions between compound 2NH<sub>2</sub> and the active site of EGFR

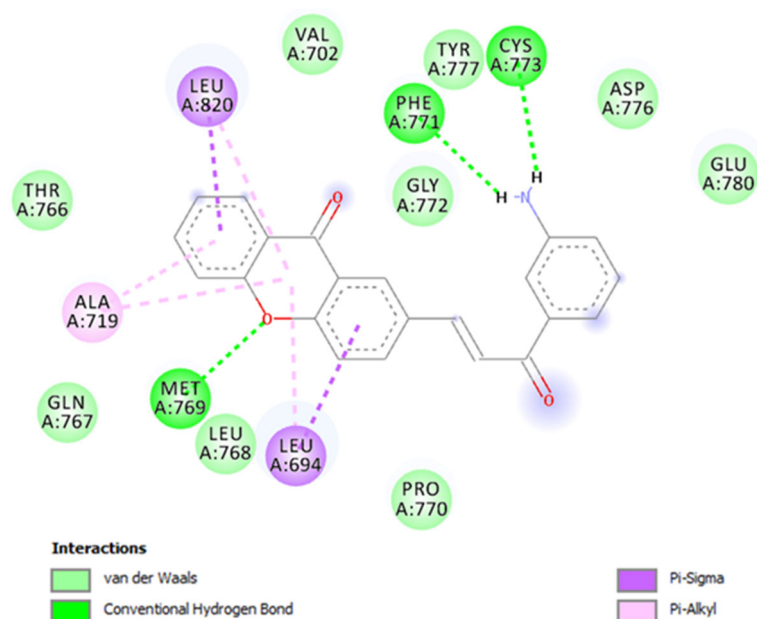


Fig S31. Non-covalent interactions between compound 3NH<sub>2</sub> and the active site of EGFR

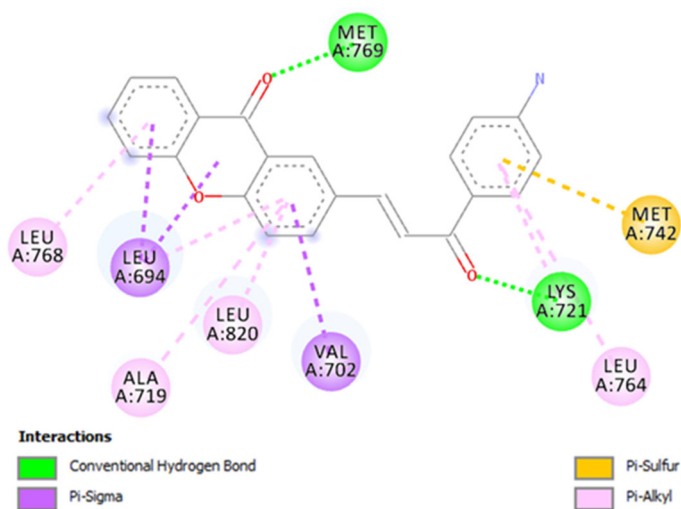


Fig S32. Non-covalent interactions between compound 4NH<sub>2</sub> and the active site of EGFR



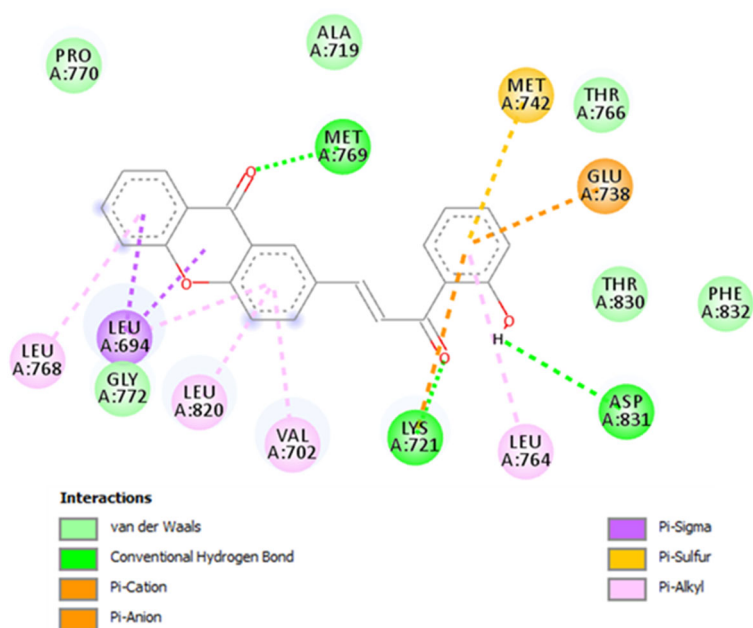


Fig S33. Non-covalent interactions between compound 2OH and the active site of EGFR

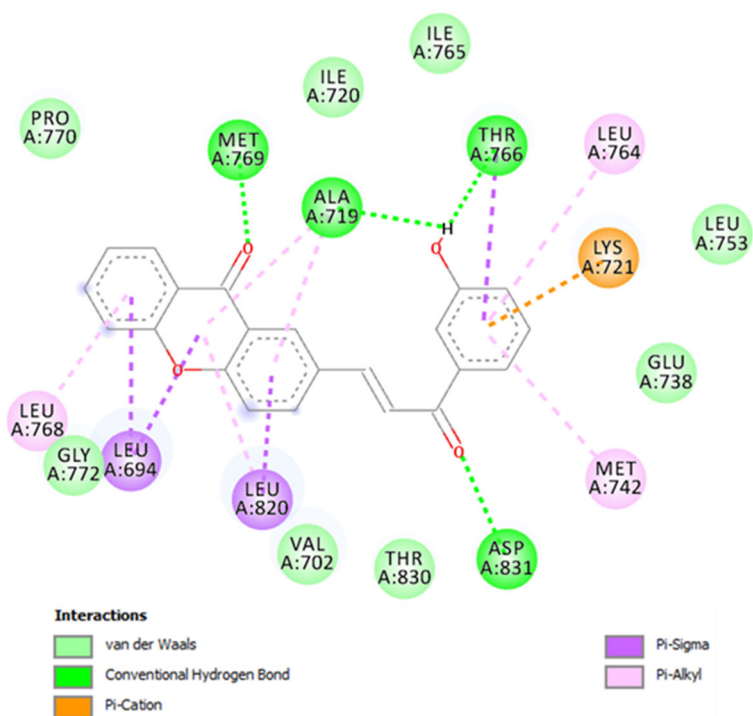


Fig S34. Non-covalent interactions between compound 3OH and the active site of EGFR

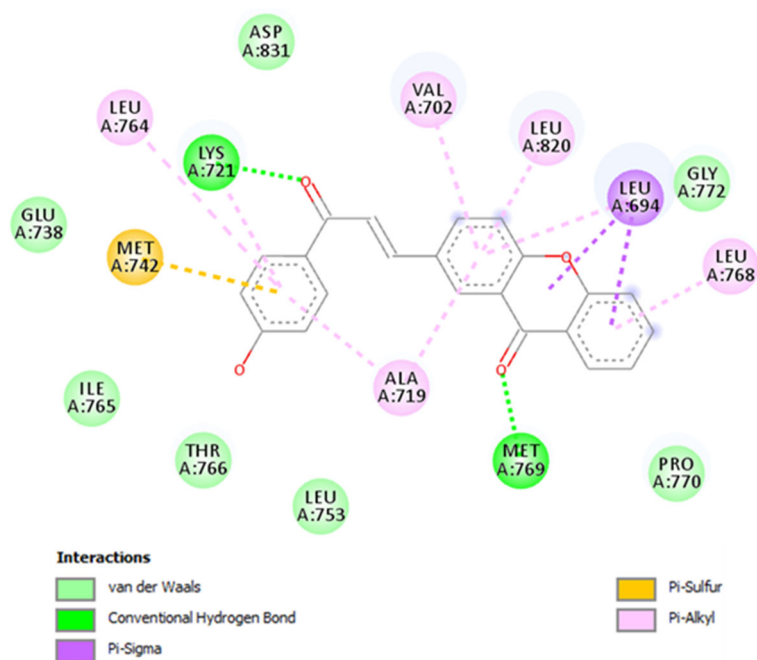


Fig S35. Non-covalent interactions between compound 4OH and the active site of EGFR

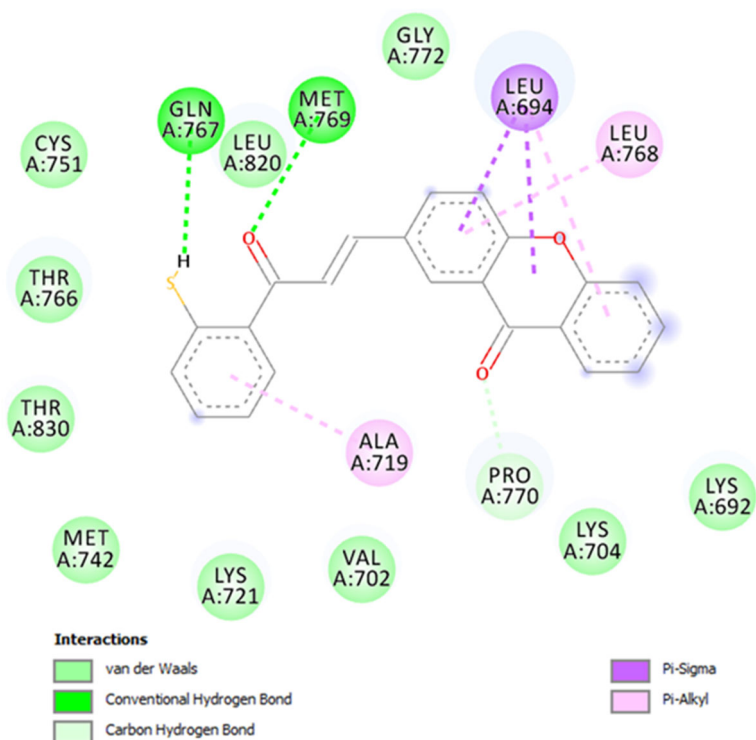


Fig S36. Non-covalent interactions between compound 2SH and the active site of EGFR

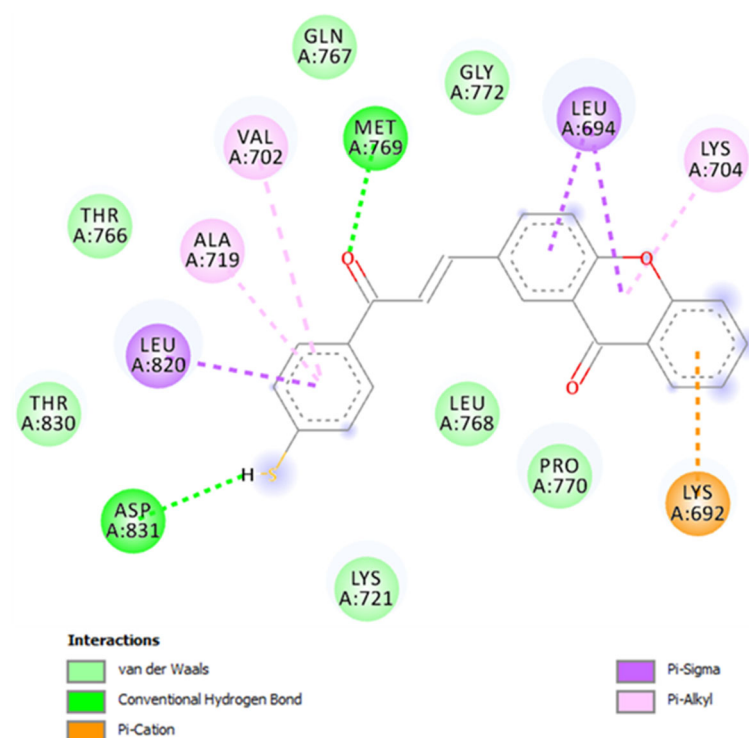


Fig S37. Non-covalent interactions between compound 4SH and the active site of EGFR

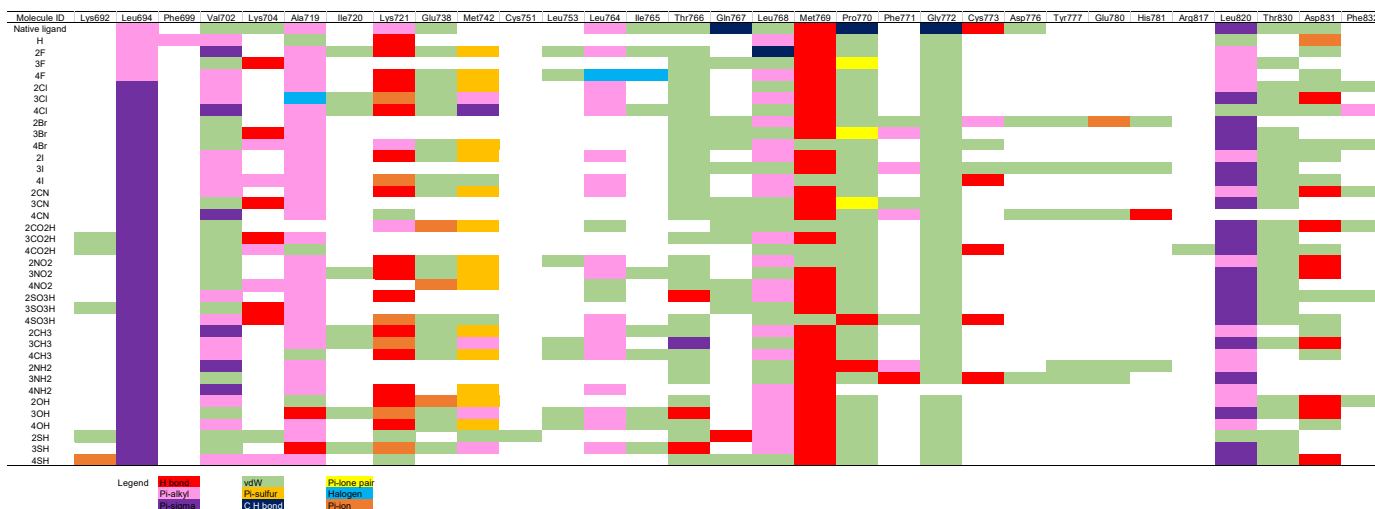


Fig S38. Non-covalent interactions diagram of xanthone-chalcones in the active site of EGFR