

Electronic Supplementary Information

Strychnine and its mono- and dimeric analogues: A pharmaco-chemical perspective

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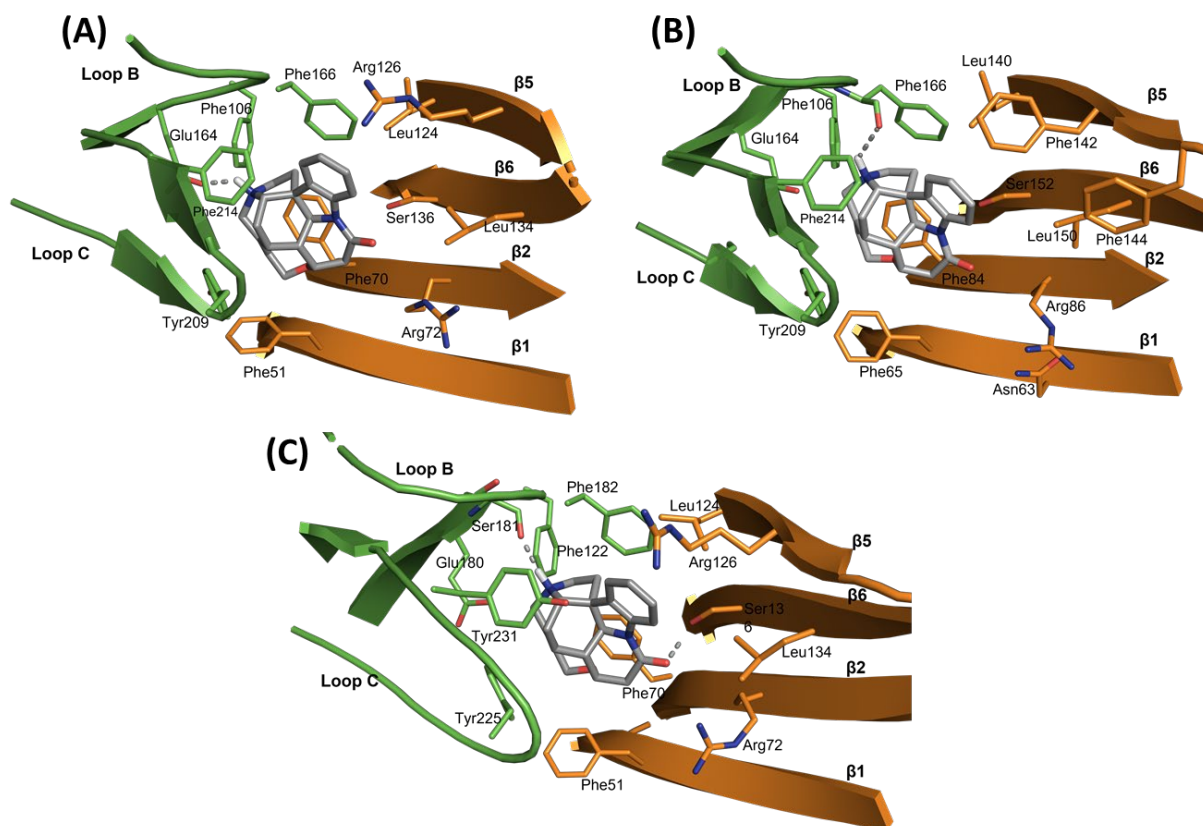


Figure S1. Binding mode of Strychnine at the orthosteric binding site at the (A) α/α , (B) α/β and (C) β/α interfaces in the cryo-EM structure of heteromeric α_2/β GlyR (PDB: 7KUY)¹¹³. With the exception of Tyr231 in loopC of the principal subunit and Phe142 of $\beta 5$ sheet of the complementary subunit, all orthosteric binding site residues are identical among the α - and β -subunits of GlyRs.

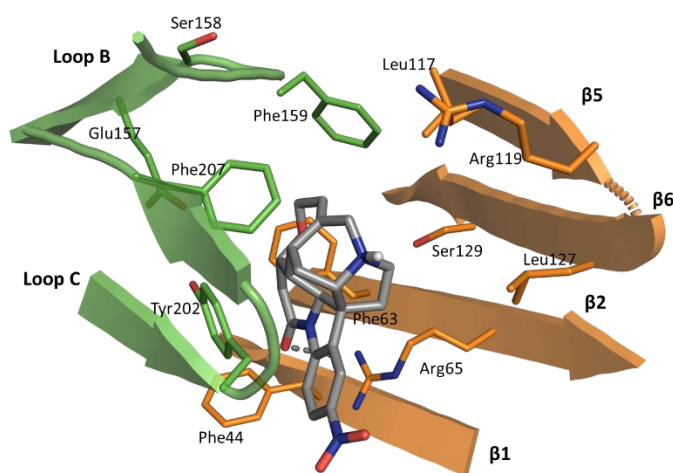


Figure S2 Docked pose of 2-nitrostrychnine **37** in the orthosteric binding site of homomeric α_3 GlyR (PDB code: 5CFB)¹¹¹. Only side chain atoms are shown for clarity.

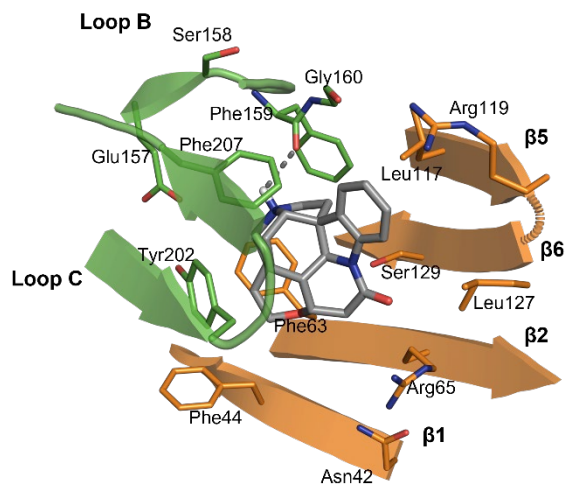


Figure S3. Docked pose of 21,22 dihydrostrychnine **17** in the orthosteric binding site of homomeric $\alpha 3$ GlyR (PDB code: 5CFB)¹¹¹. Only side chain atoms are shown for clarity.

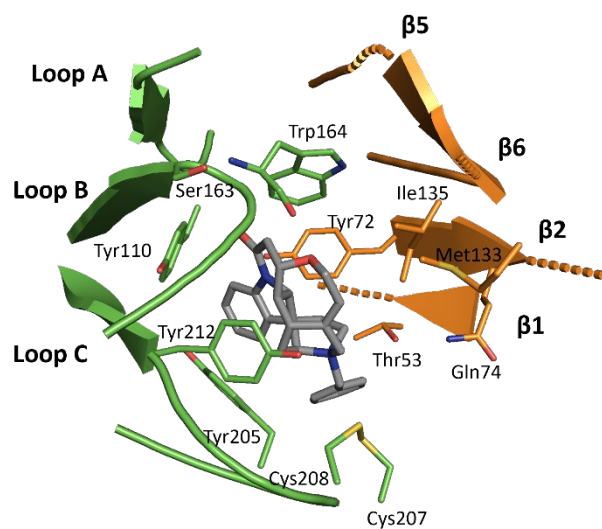


Figure S4. Docked pose of **34c** in the orthosteric binding site of AcAChBP (PDB code: 5O8T)¹⁵⁵. Only side chain atoms are shown for clarity.