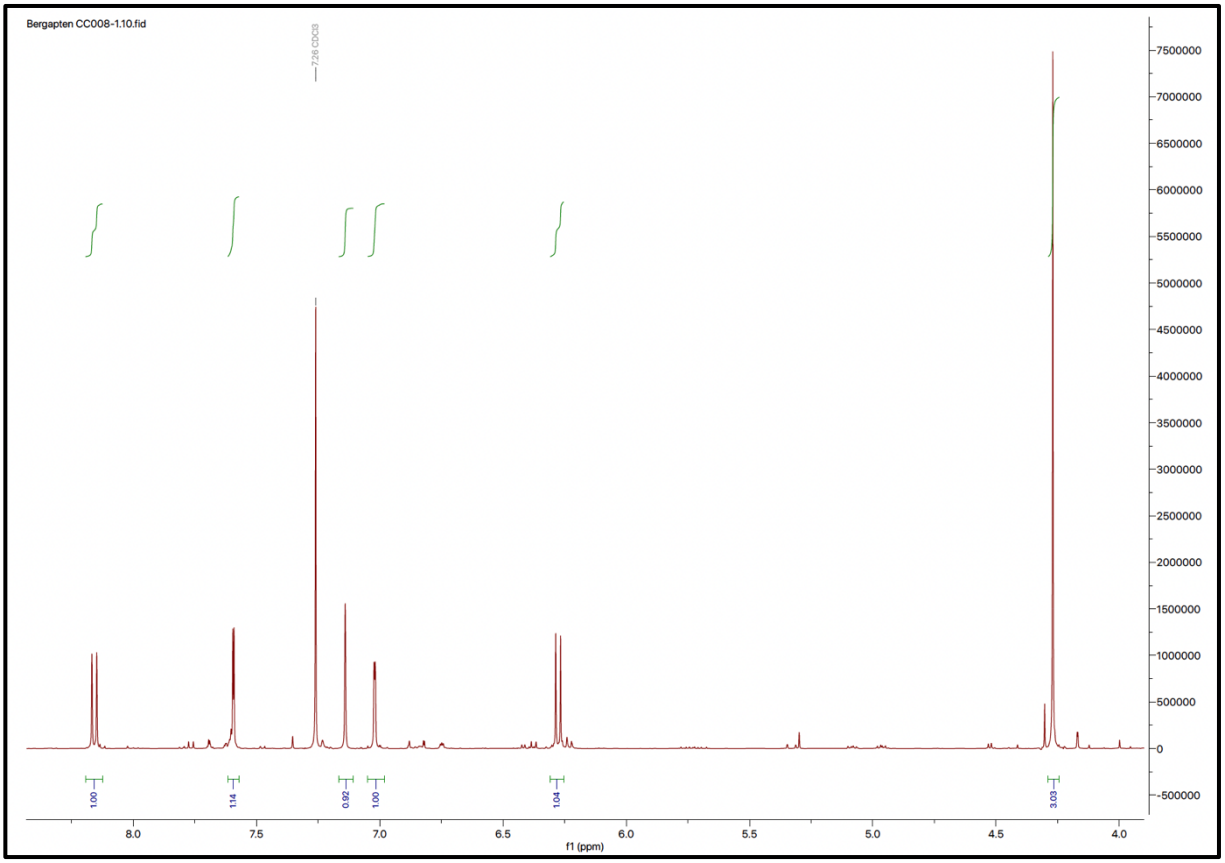


Supplementary Figures S1:^{1}H NMR spectrum (500 MHz, CDCl3) of Bergapten (1)

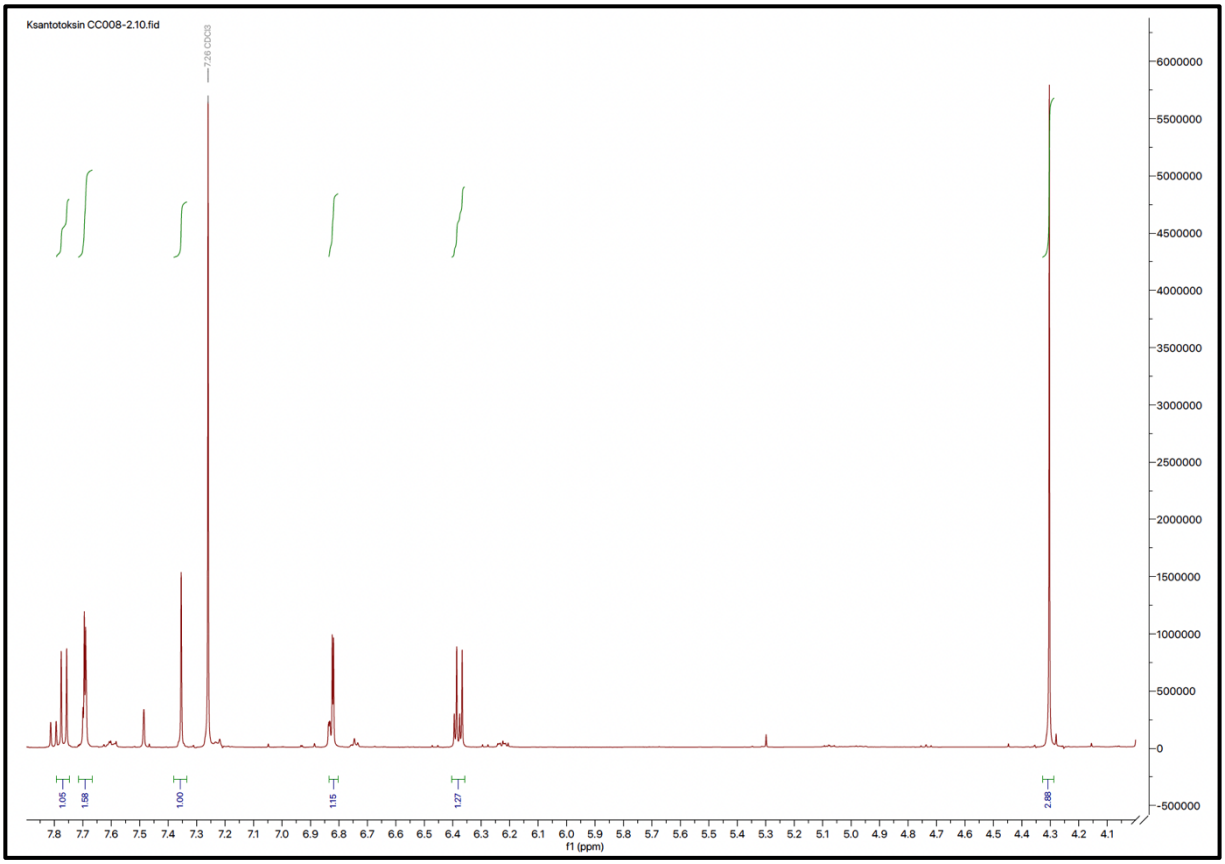


Figure S 2:^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Xanthotoxin (2)

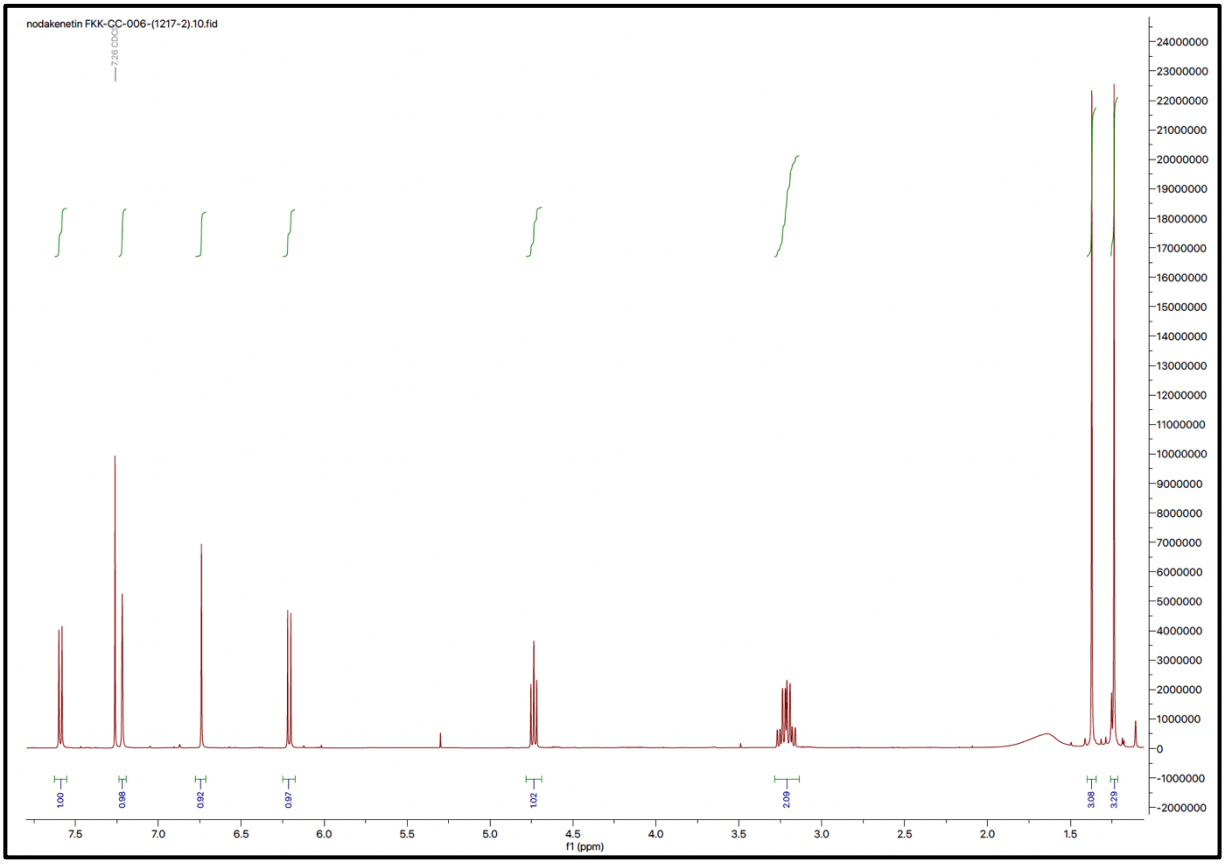


Figure S 3:^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Marmesin (3)

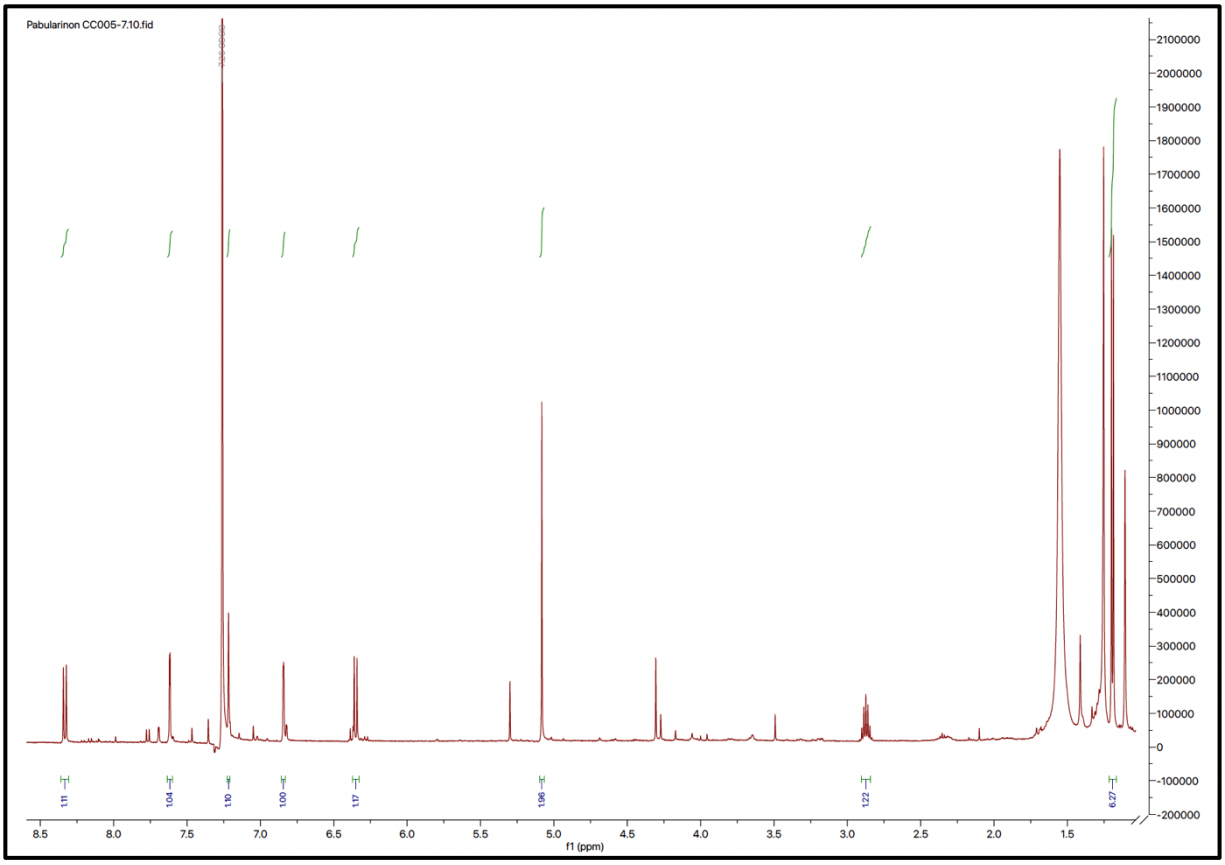


Figure S 4: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Pabularinone (4)

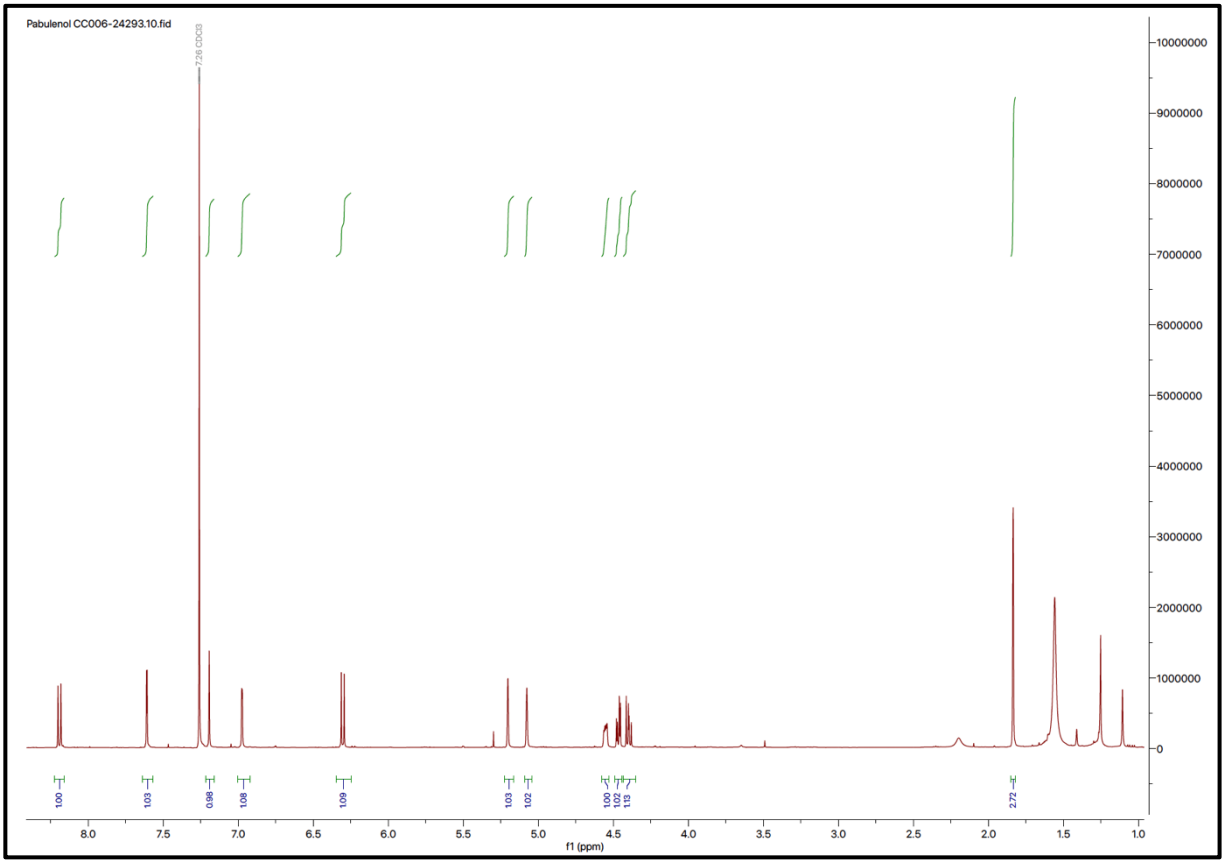


Figure S 5:^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Pabulenol (5)

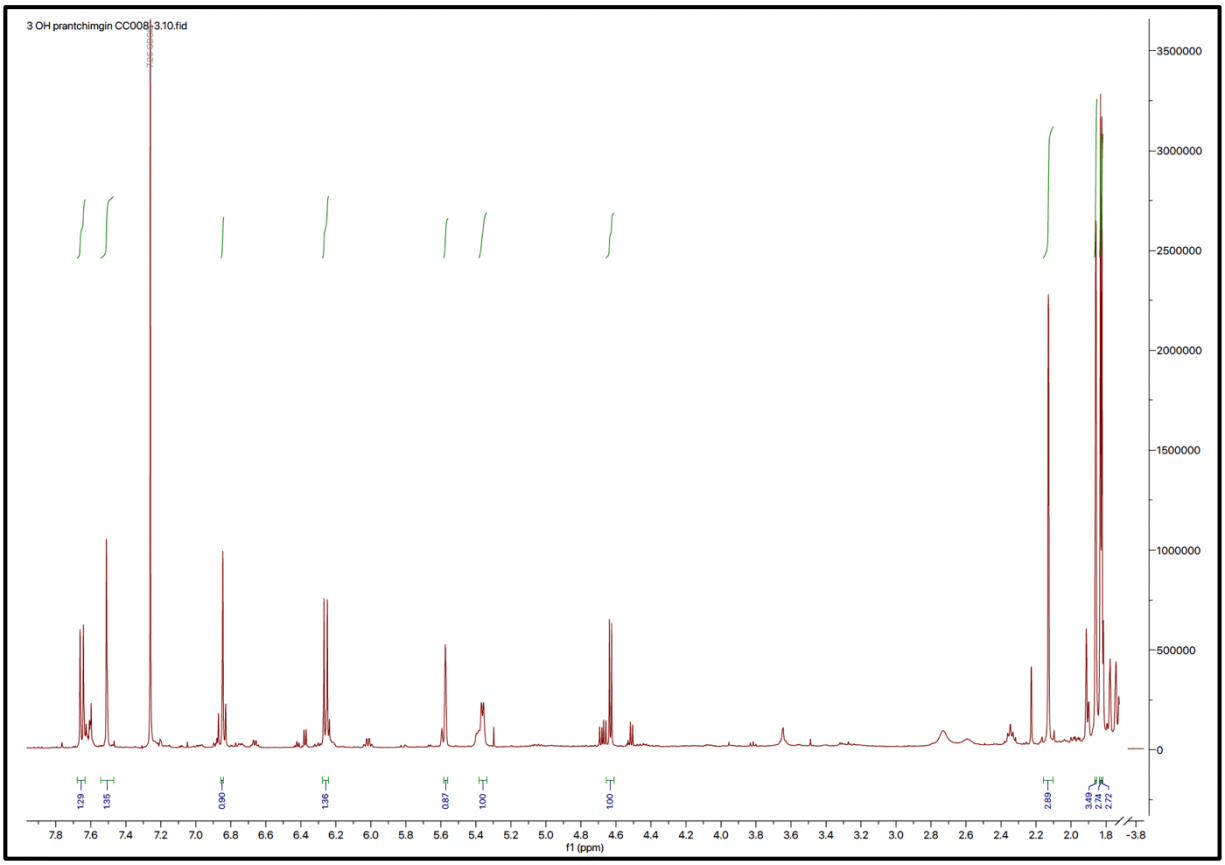


Figure S 6: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of 3^{I}-Hydroxypranchimgin (6)

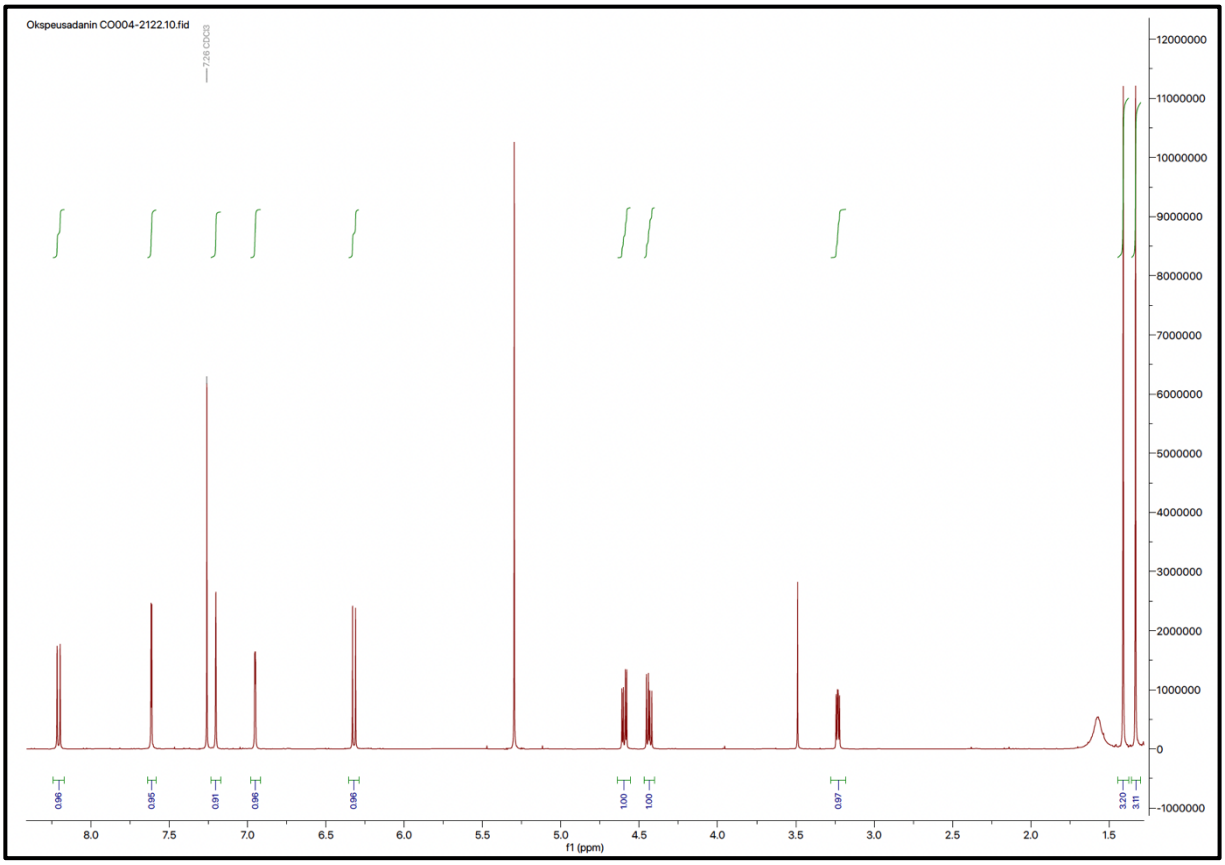


Figure S 7: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Oxypeucedanin (7)

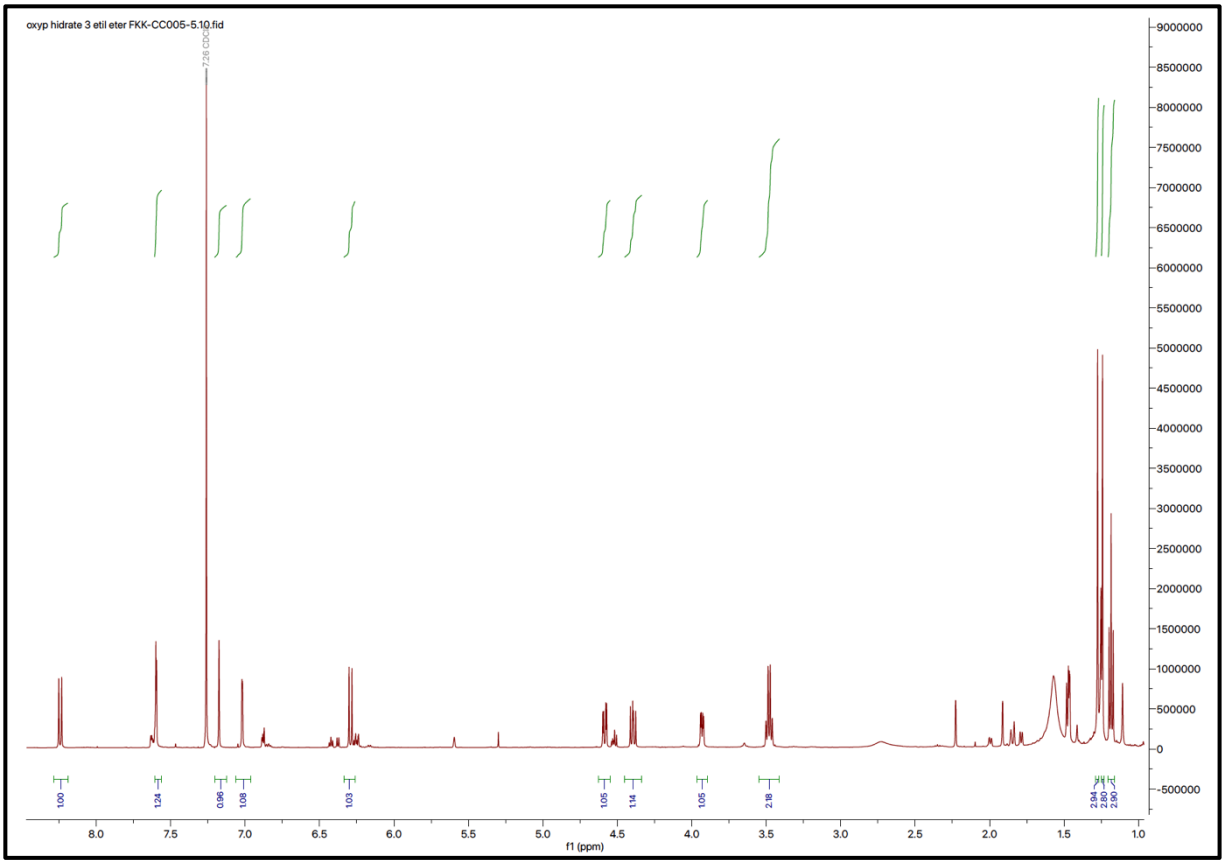


Figure S 8: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Oxypeucedanin ethanolate (8)

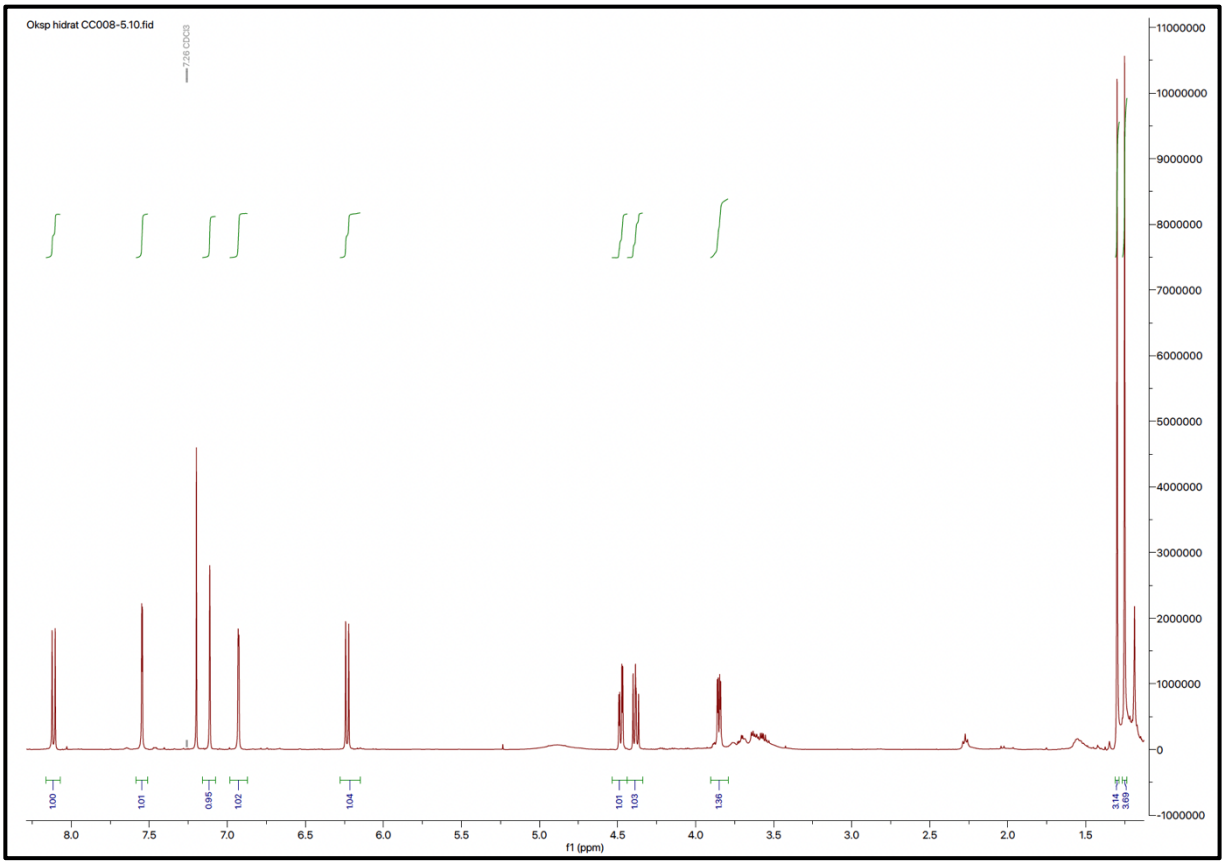


Figure S 9: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Oxypeucedanin hydrate (9)

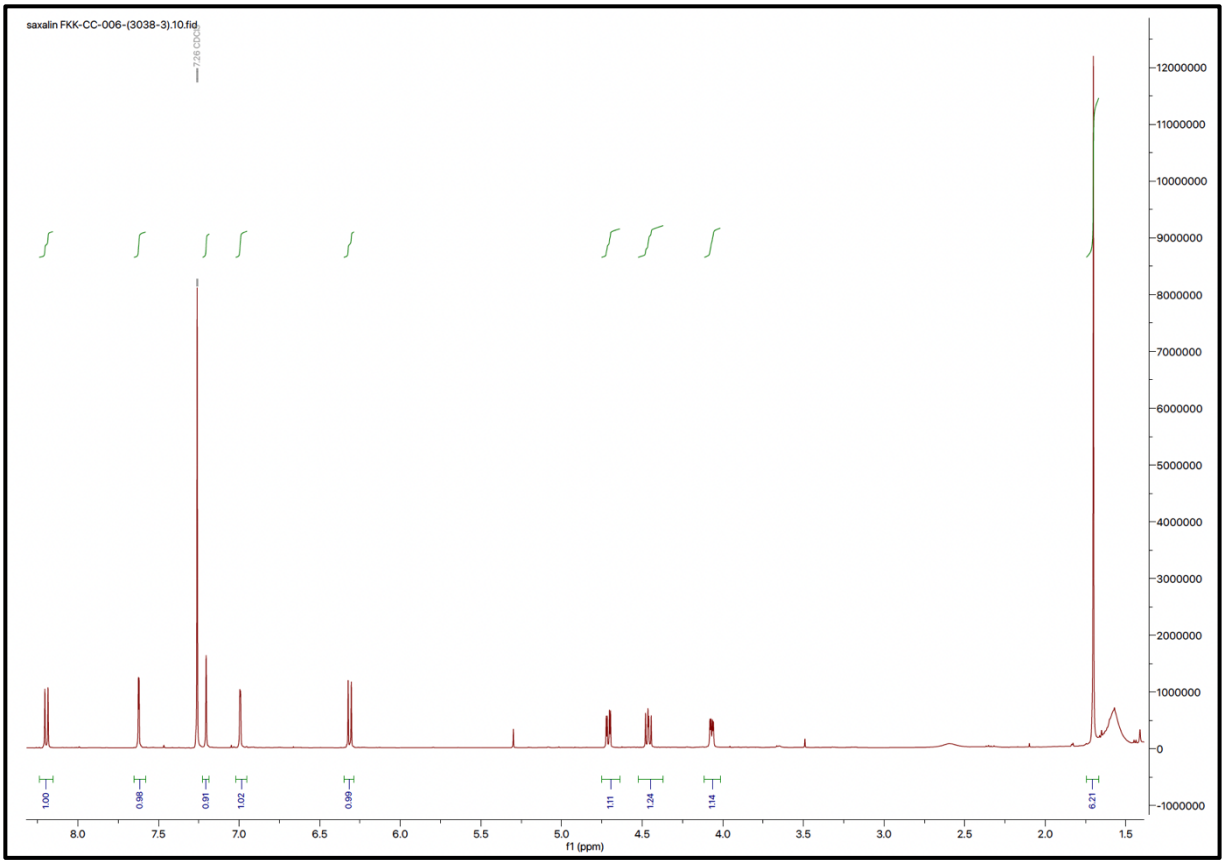


Figure S 10: ^{1}H NMR spectrum (500 MHz, $CDCl_3$) of Saxalin (10)

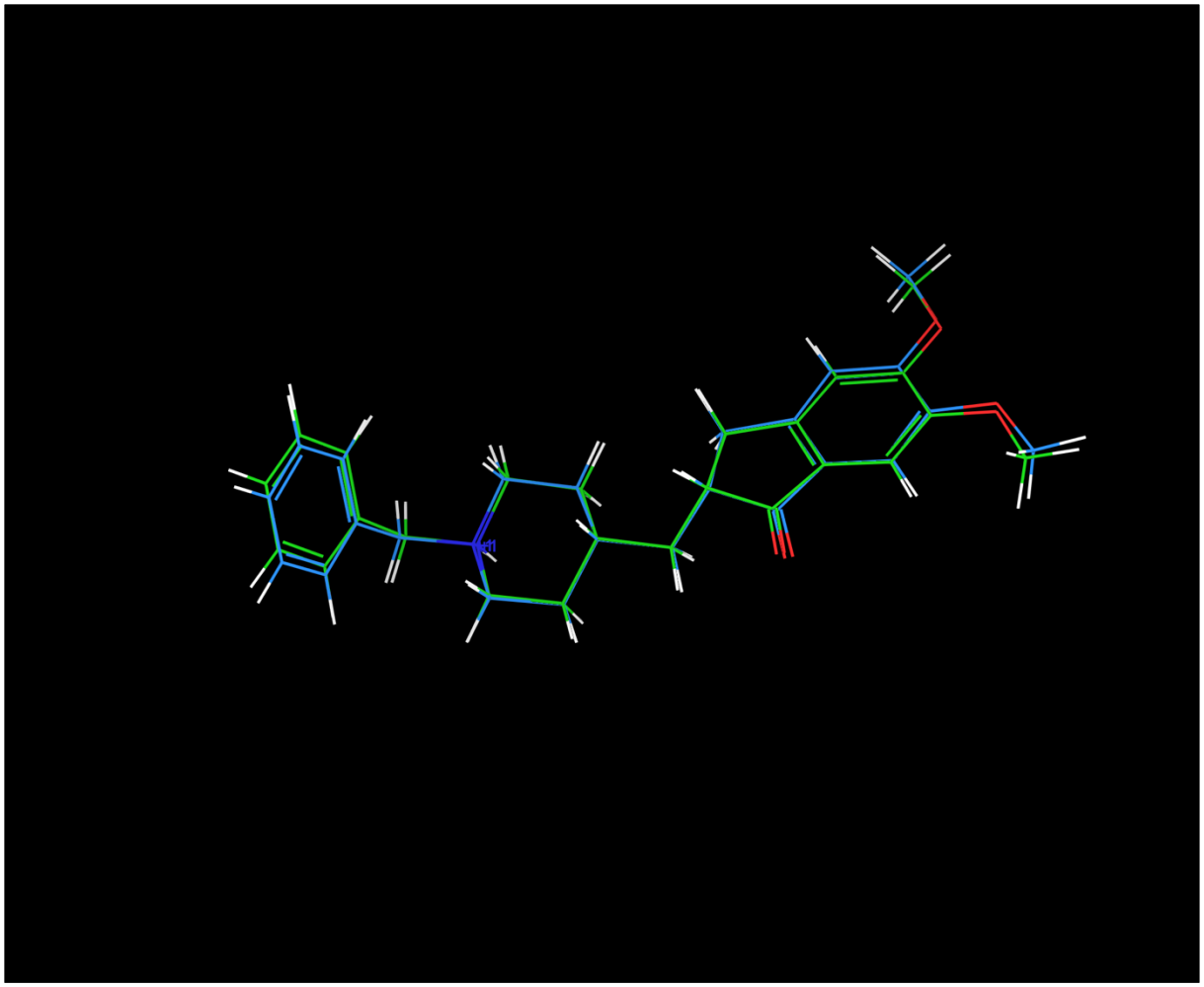


Figure S 11: Superposition of the native ligand (blue) and redocked poses (green) of donepezil in the active site of human AChE (PDB ID: 4EY7).

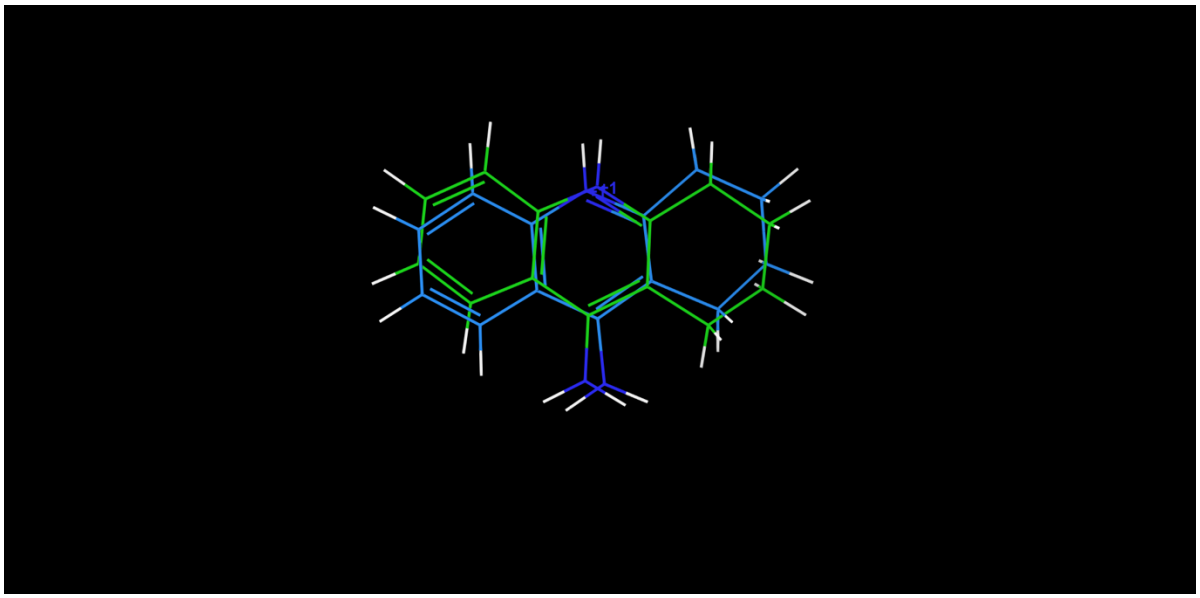


Figure S 12: Superposition of the native ligand (blue) and redocked poses (green) of tacrine in the active site of BChE (PDB ID: 4BDS).

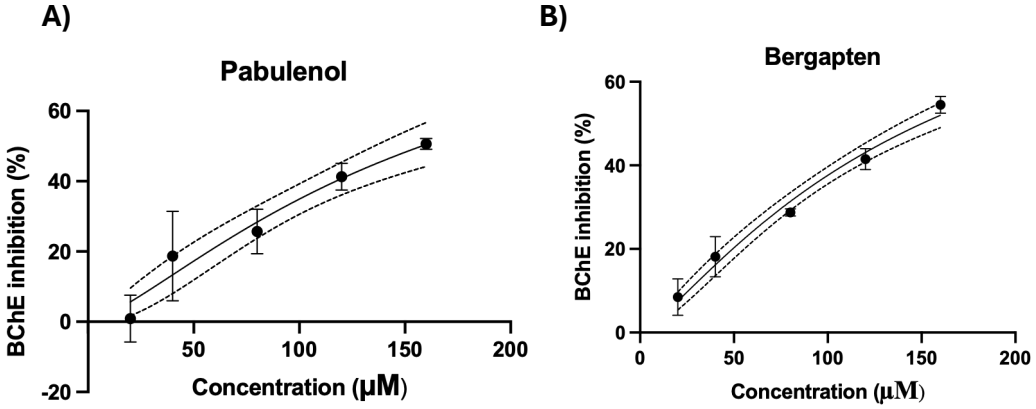


Figure S 13: Concentration–response curves of pabulenol (A) and bergapten (B) against butyrylcholinesterase (BChE). Data are presented as mean ± SD. The solid lines represent nonlinear regression fits using a variable-slope model, with the Bottom and Top parameters constrained to 0% and 100%, respectively. Dashed lines indicate the 95% confidence bands of the fitted curves.

The 95% confidence intervals for the IC_{50} estimates obtained from the combined regression analysis were 135.5–197.6 µM for pabulenol and 138.3–165.8 µM for bergapten. These intervals, particularly for pabulenol, indicate uncertainty in IC_{50} estimation near the upper limit of the tested concentration range (160 µM).