Supporting Information

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Synthesis of novel salicylic acid-pyrrolone conjugates and investigation of their cytotoxic and genotoxic effects in *Allium cepa* root tip cells

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General Procedure for the Synthesis of Novel Salicylic Acid Derived Compounds (7a-e)

A mixture of furan-3-one **5** (10.0 mmol) and salicylic acid derivative **6** (10.0 mmol) in methanol (30 mL) was refluxed in the presence of catalytic amount of pyridine for 24 hours. The reaction was followed by TLC. After the solvent was removed under reduced pressure, the oily residue was treated with diethylether. The precipitated product was filtered off and purified by recrystallization or column chromatography methods. Butanol was used in recrystallization processes and chloroform:methanol solvent pair (10:1) was used in column chromatography processes (Yields: 74-83 %).

2-hydroxy-5-(2-hydroxy-2-(2-methoxy-2-oxoethyl)-4-(4-methoxybenzoyl)-5-(4-methoxy phenyl)-3-oxo-2,3-dihydro-1H-pyrrol-1-yl)benzoic acid (7a)

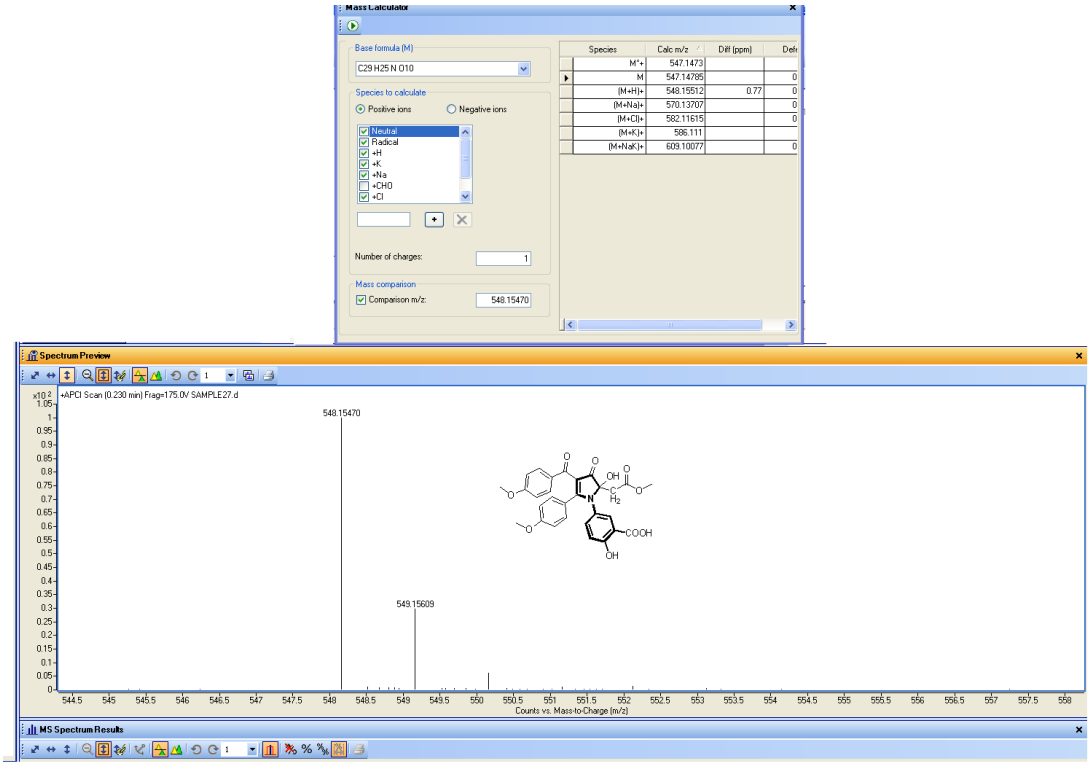

Figure S3: HRMS spectra of **7a**

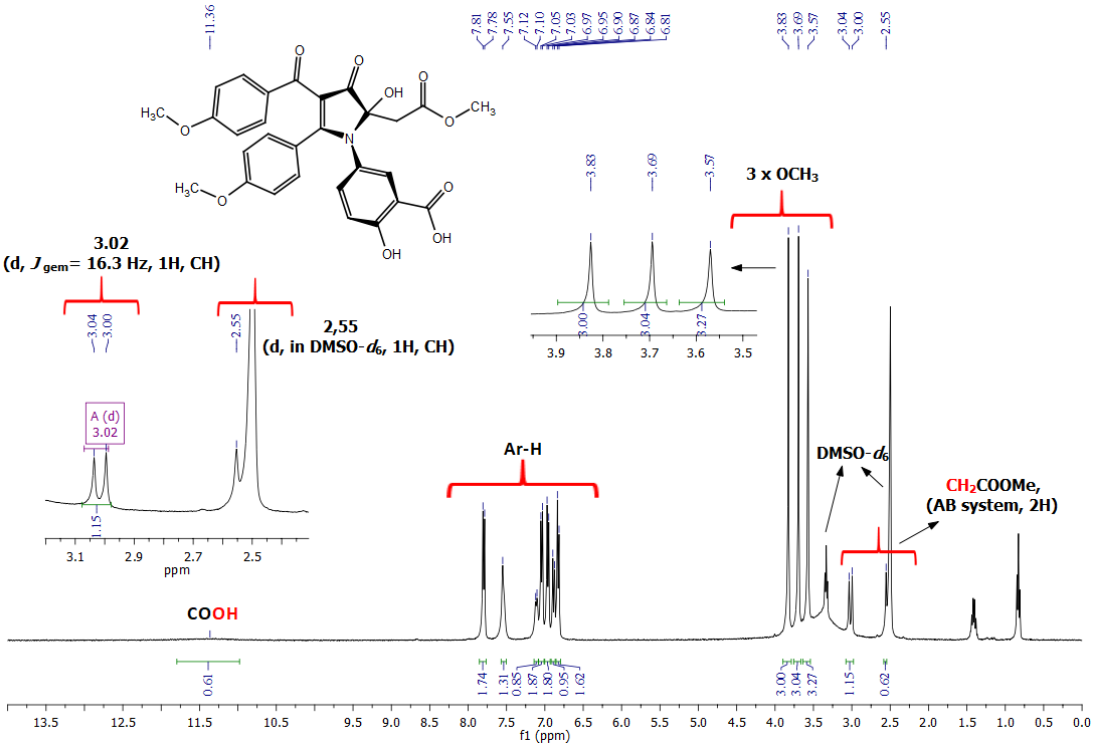

Figure S4: ^{1}H NMR spectra of **7a**

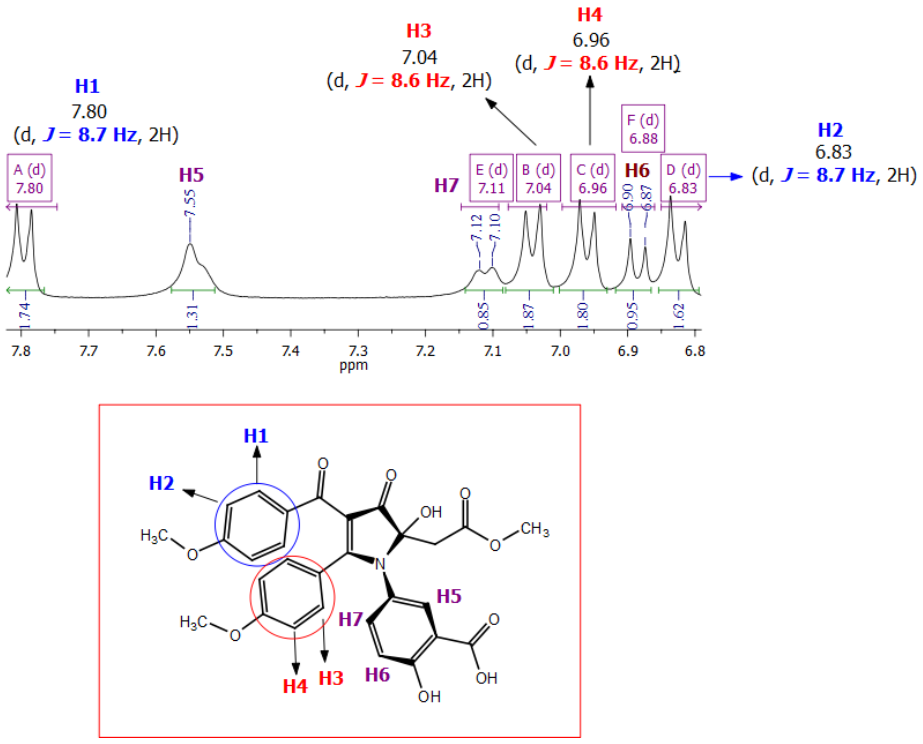

Figure S5: ^{1}H NMR spectra (AA'BB' system) of **7a**

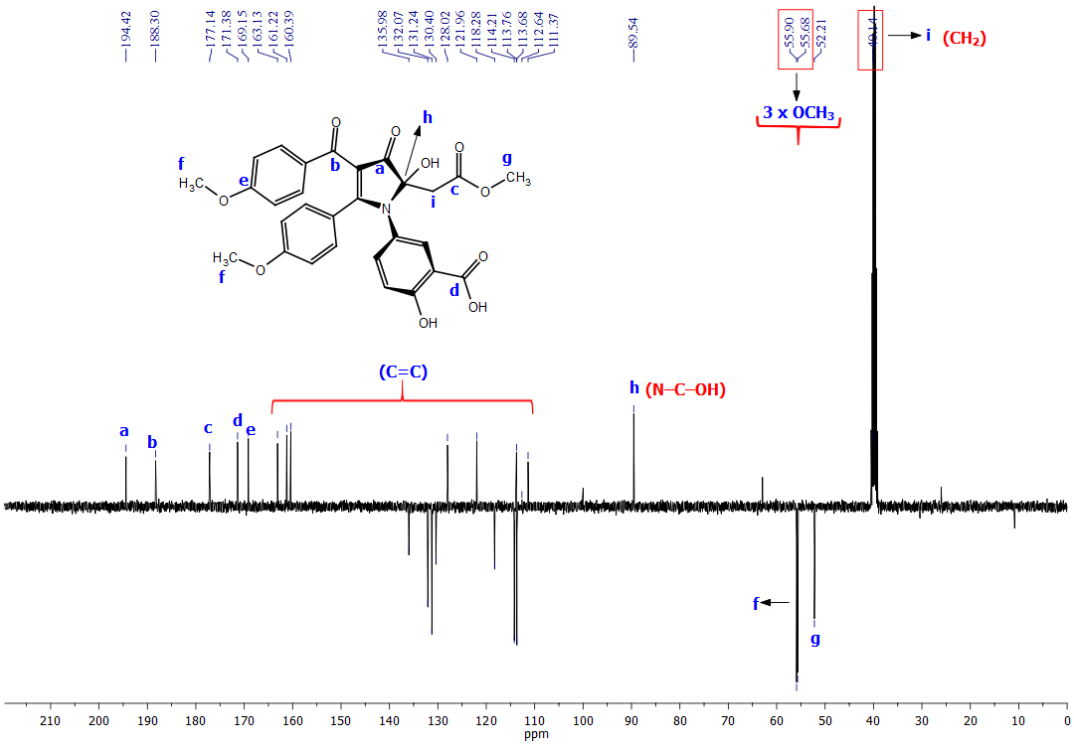

Figure S6: ^{13}C NMR spectra of **7a**

5-(2-(2-ethoxy-2-oxoethyl)-2-hydroxy-4-(4-methoxybenzoyl)-5-(4-methoxyphenyl)-3-oxo-2,3-dihydro-1H-pyrrol-1-yl)-2-hydroxybenzoic acid (7b)

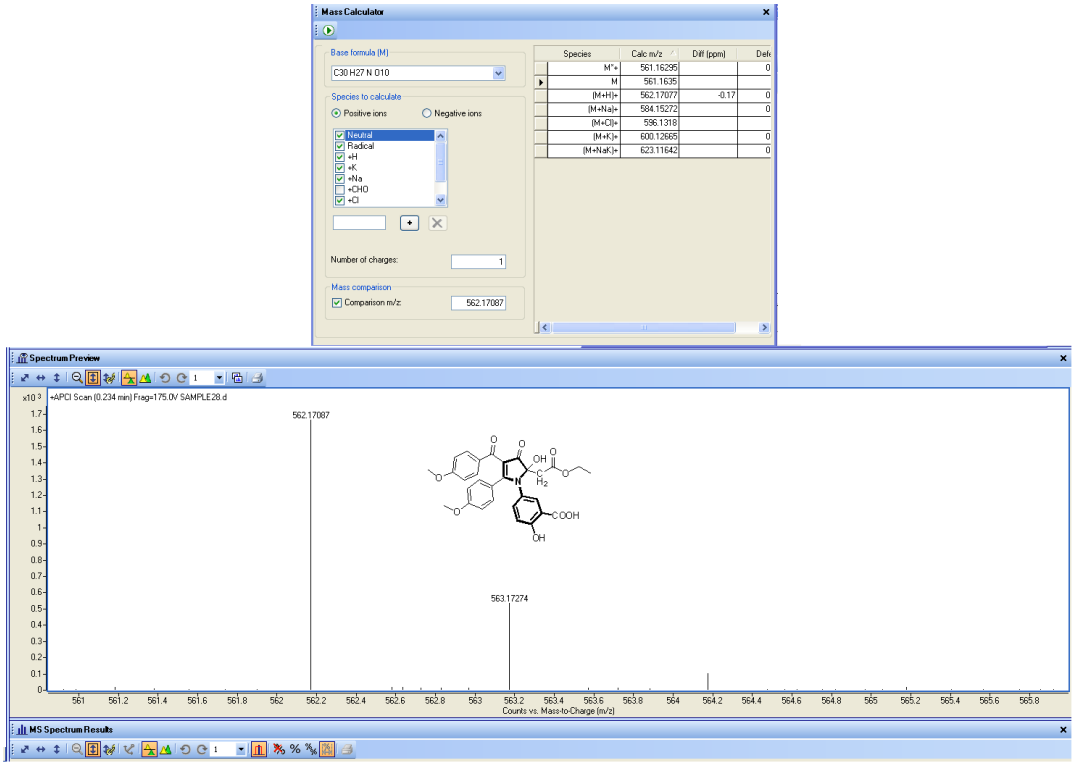

Figure S7: HRMS spectra of **7b**

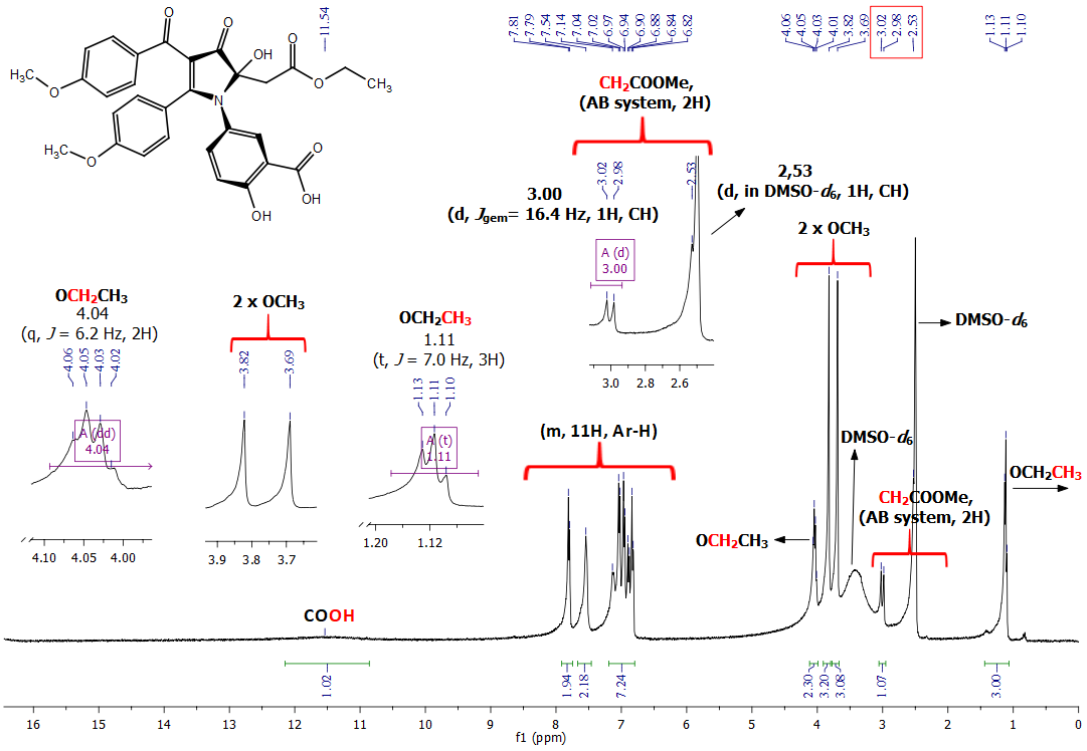

Figure S8: ^{1}H NMR spectra of **7b**

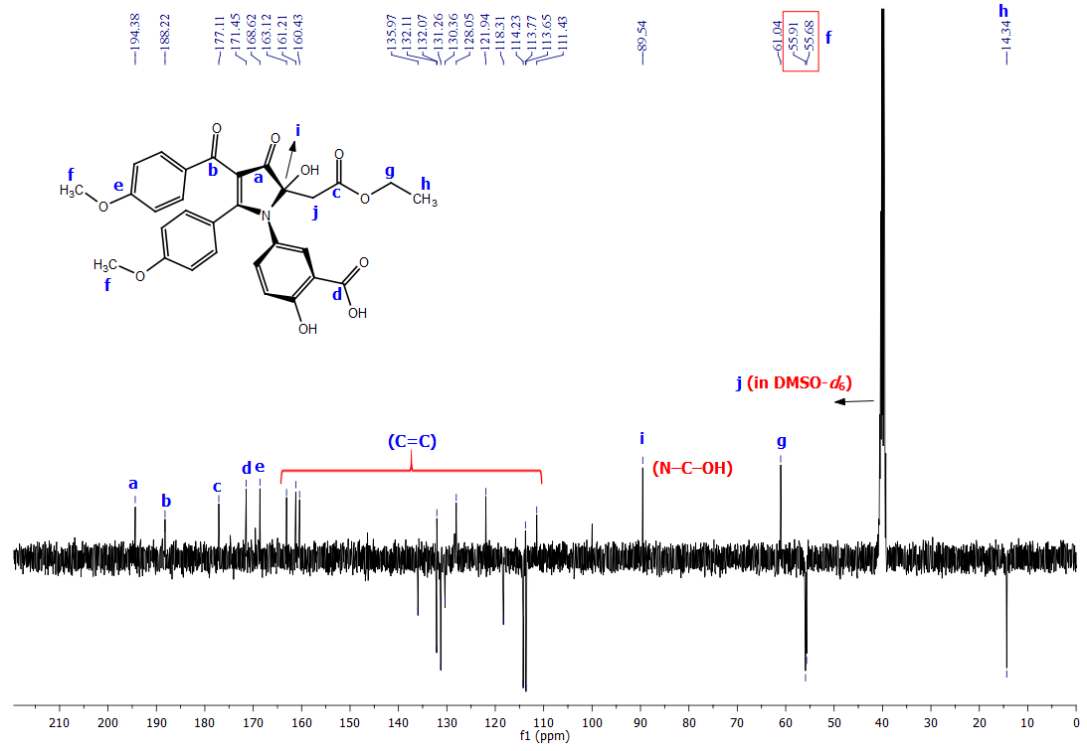

Figure S9: ^{13}C NMR spectra of **7b**

2-hydroxy-4-(2-hydroxy-2-(2-methoxy-2-oxoethyl)-4-(4-methoxybenzoyl)-5-(4-methoxy phenyl)-3-oxo-2,3-dihydro-1H-pyrrol-1-yl)benzoic acid (7c)

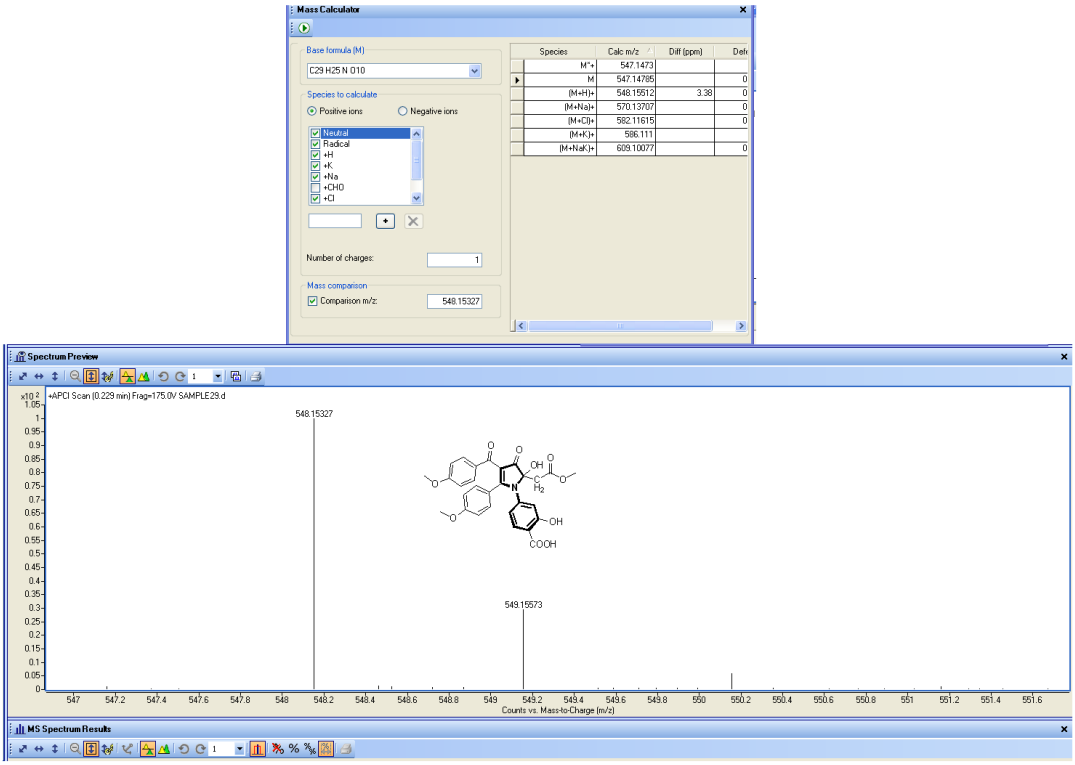

Figure S10: HRMS spectra of **7c**

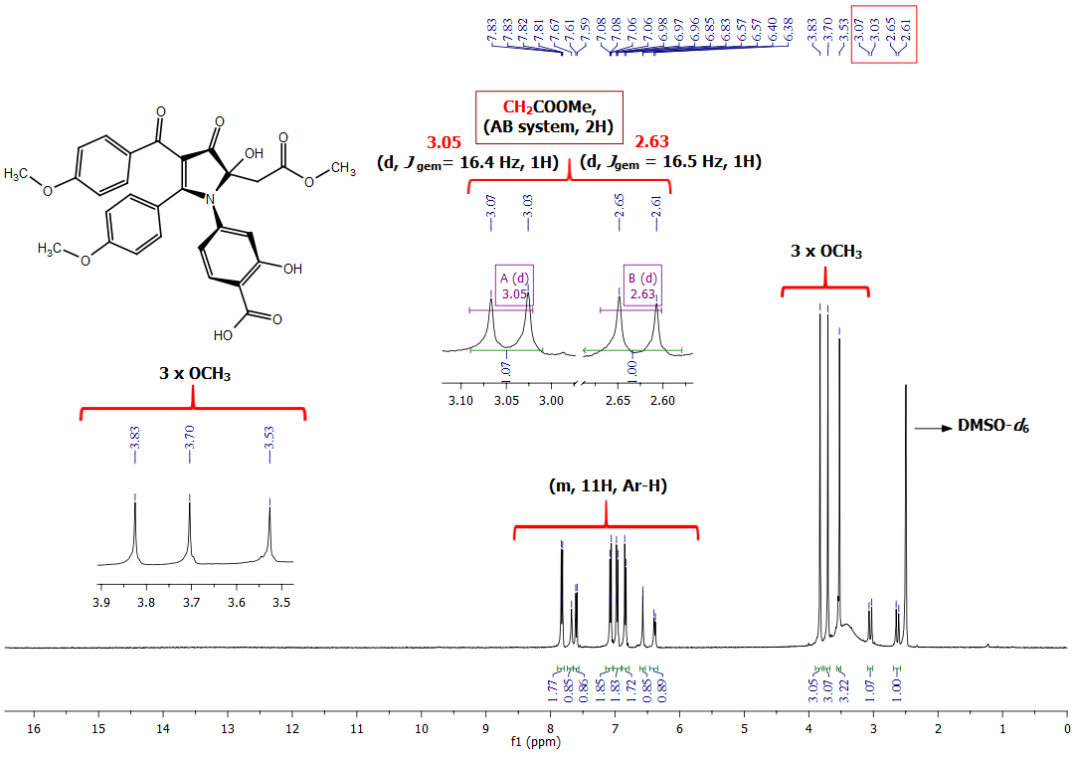

Figure S11: ^{1}H NMR spectra of **7c**

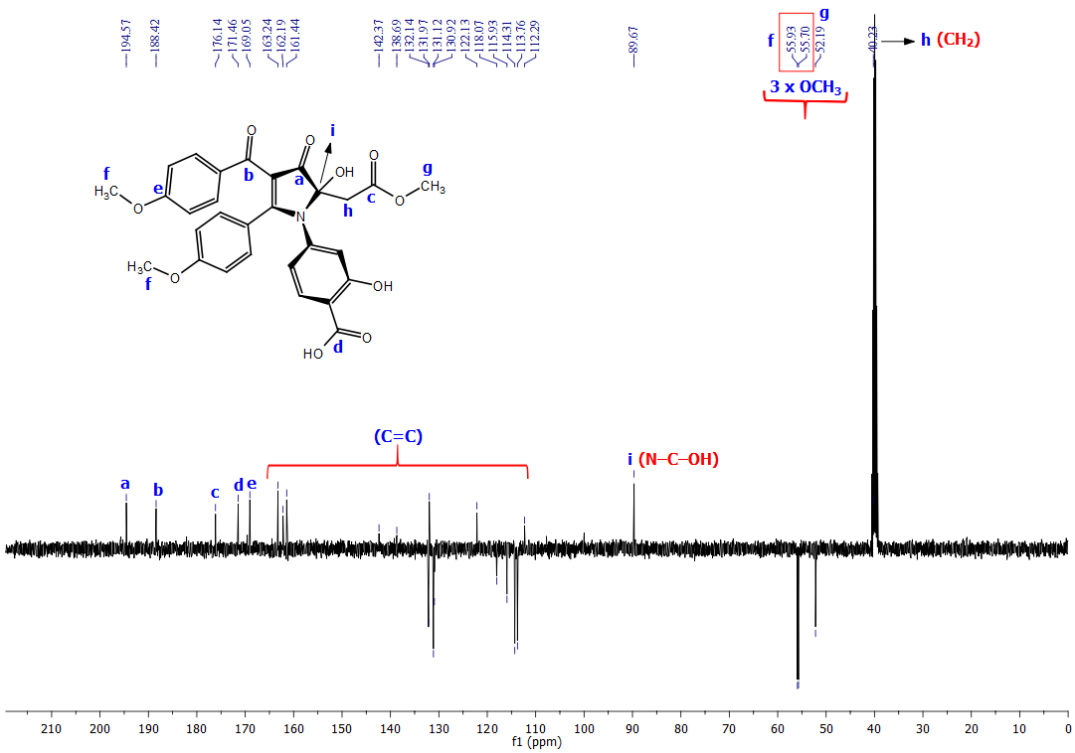

Figure S12: ^{13}C NMR spectra of **7c**

4-(2-(2-ethoxy-2-oxoethyl)-2-hydroxy-4-(4-methoxybenzoyl)-5-(4-methoxyphenyl)-3-oxo-2,3-dihydro-1H-pyrrol-1-yl)-2-hydroxybenzoic acid (7d)

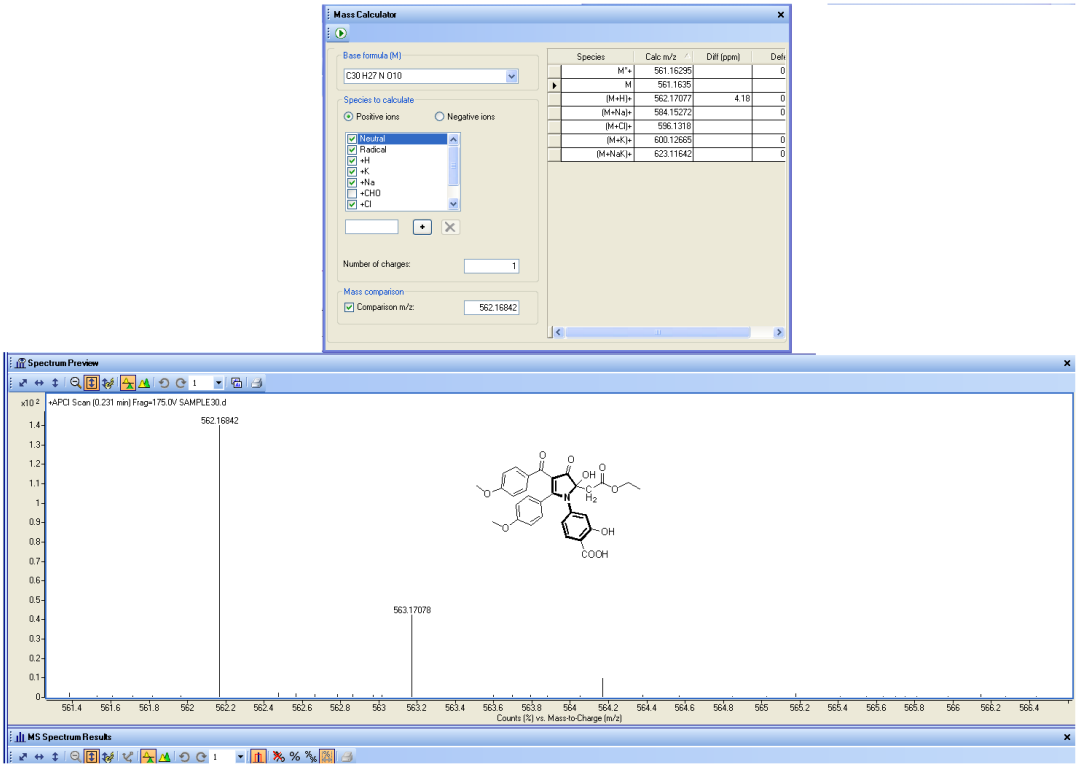

Figure S13: HRMS spectra of **7d**

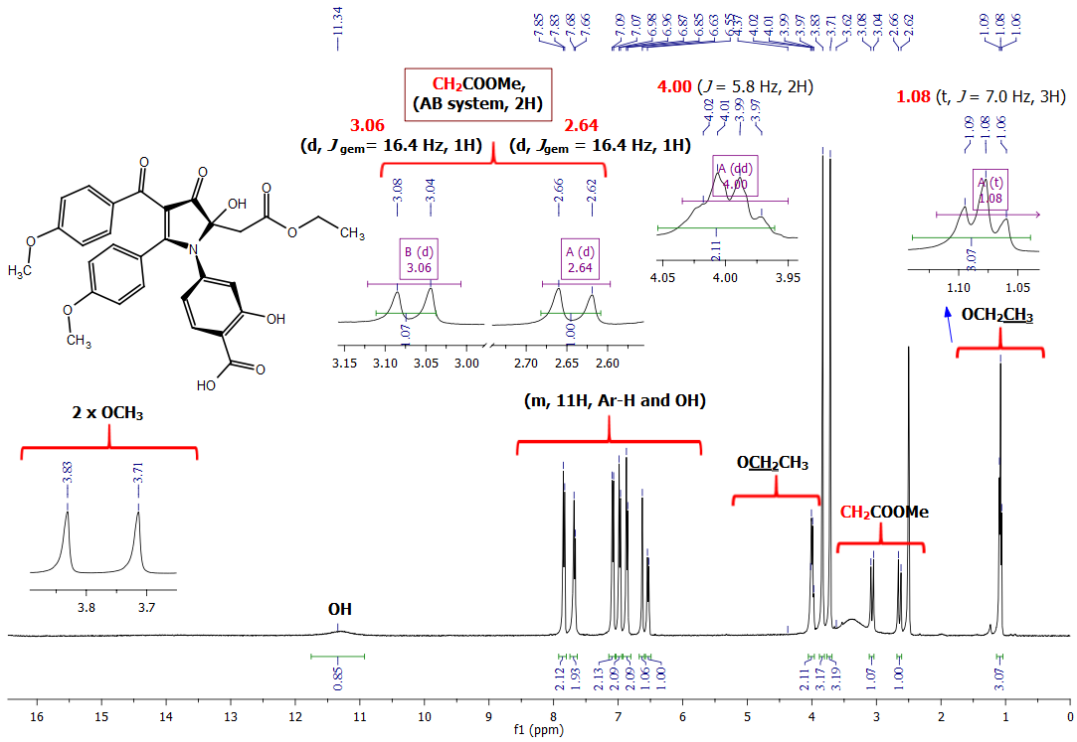

Figure S14: ^{1}H NMR spectra of **7d**

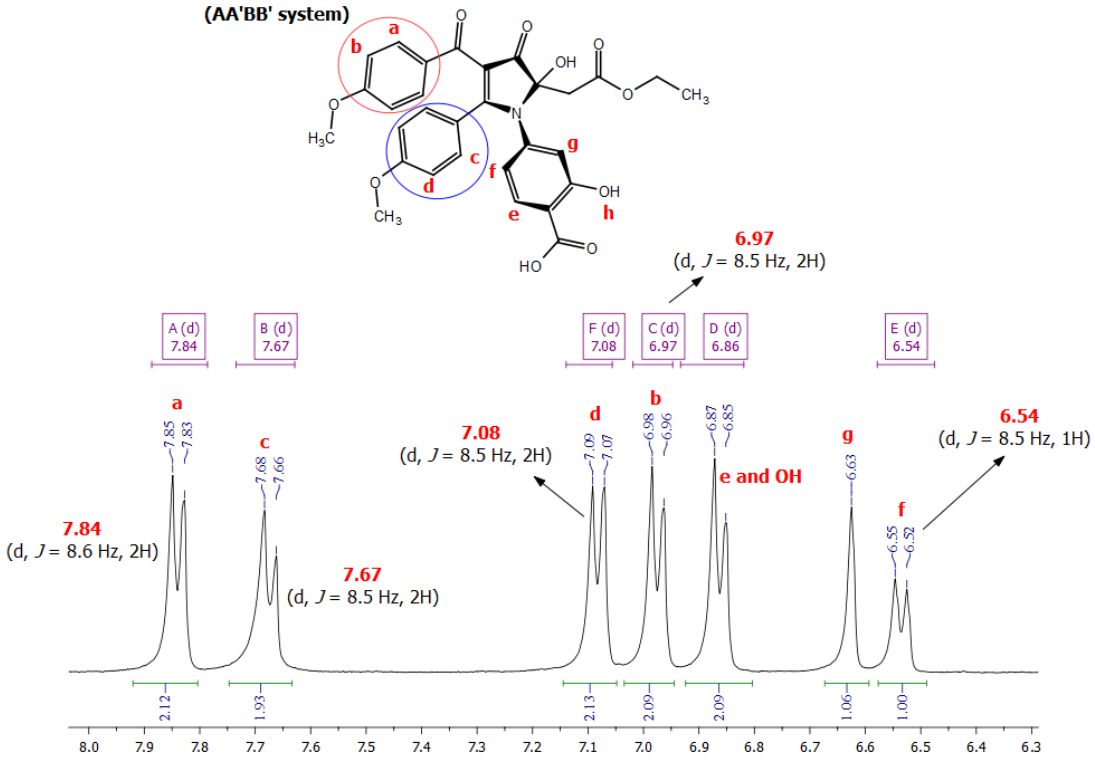

Figure S15: ^{1}H NMR spectra (AA'BB' system) of **7d**

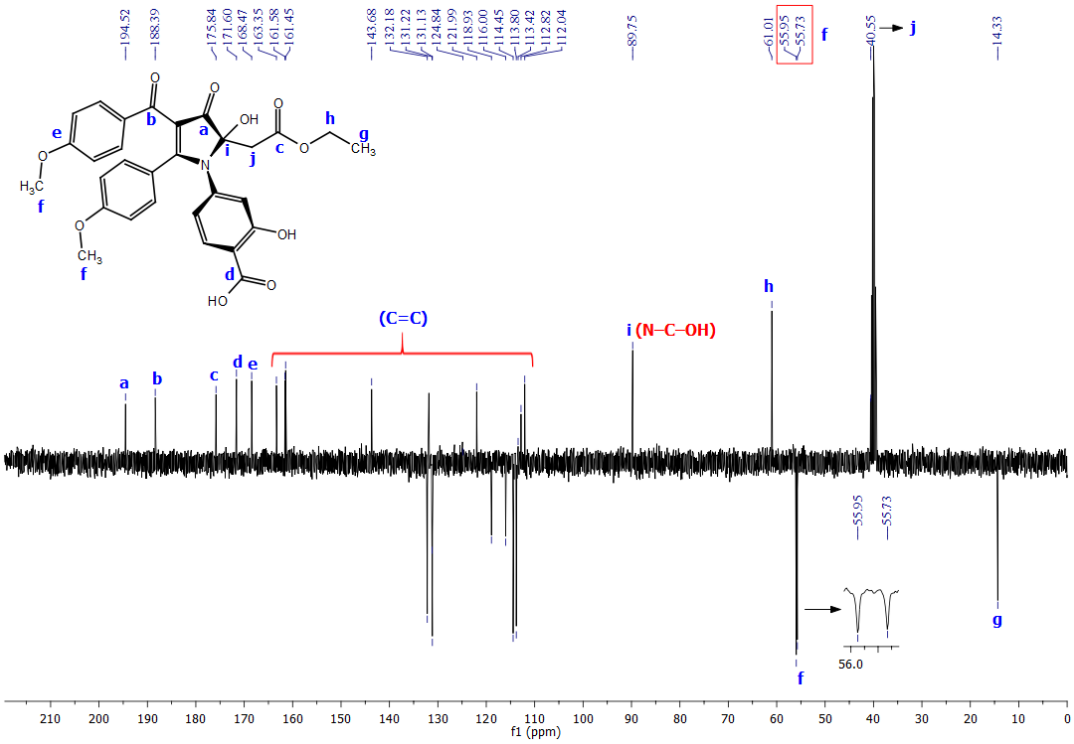

Figure S16: ^{1}H NMR spectra of **7d**

4-(4-(ethoxycarbonyl)-2-hydroxy-2-(2-methoxy-2-oxoethyl)-5-(4-methoxyphenyl)-3-oxo-2,3-dihydro-1H-pyrrol-1-yl)-2-hydroxybenzoic acid (7e)

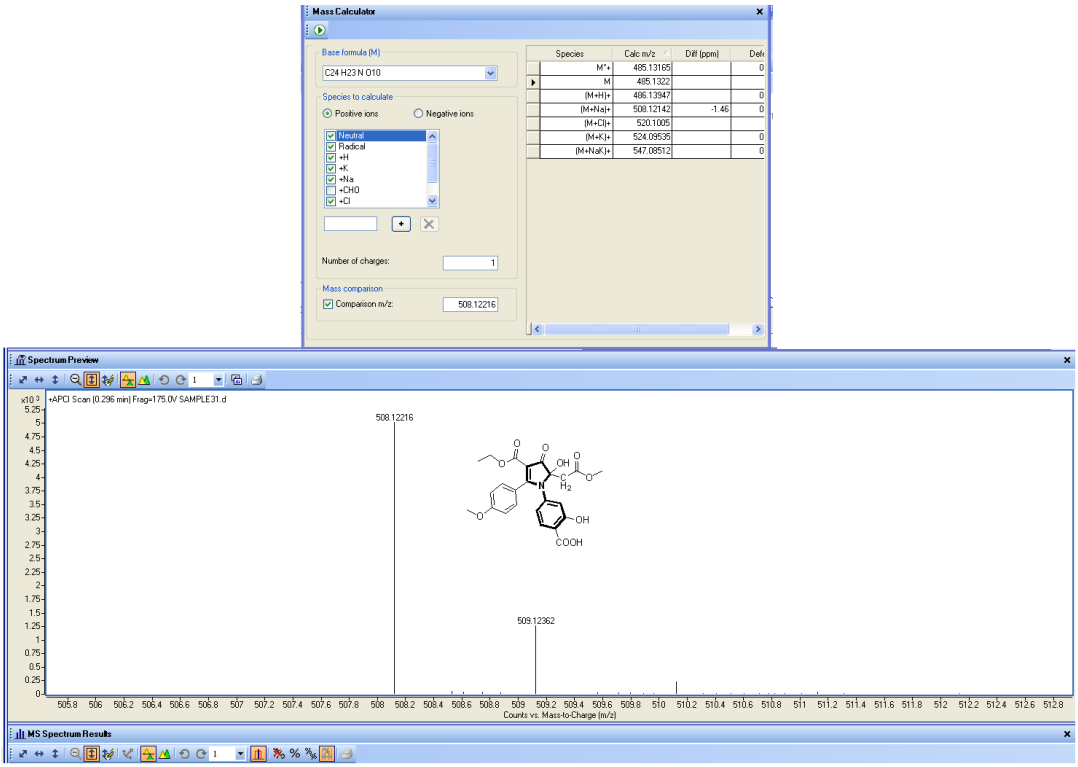

Figure S17: HRMS spectra of **7e**

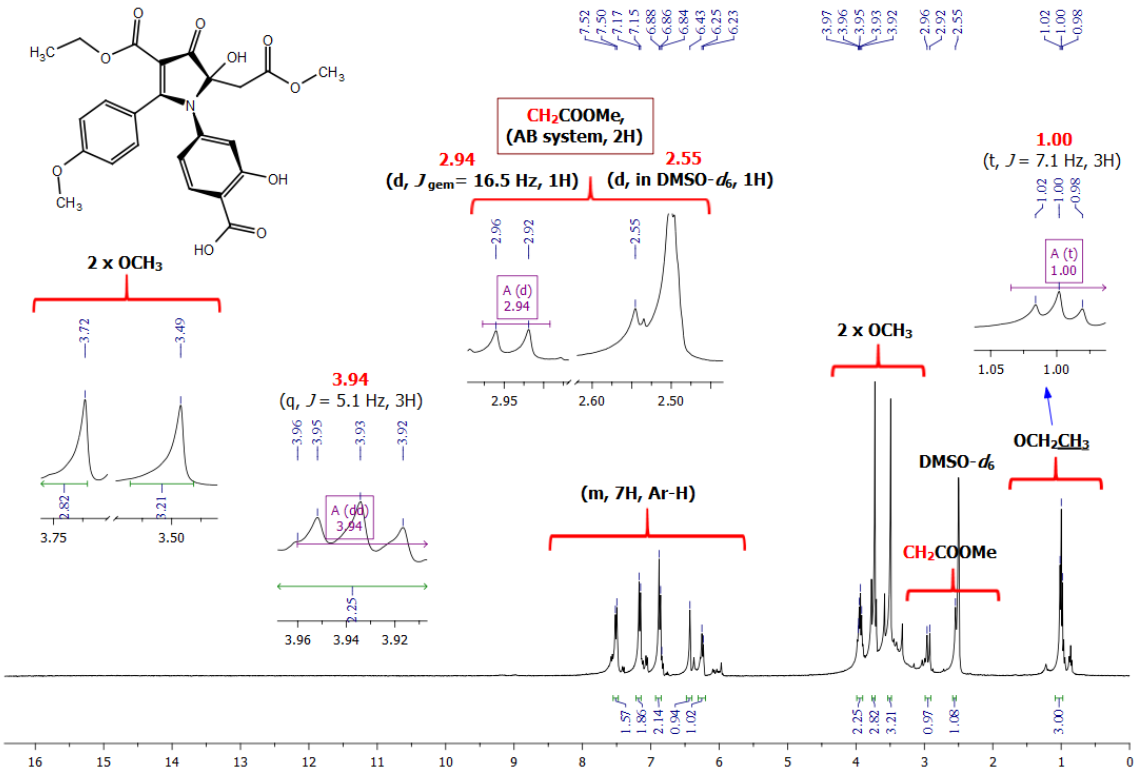

Figure S18: ^{1}H NMR spectra of **7e**

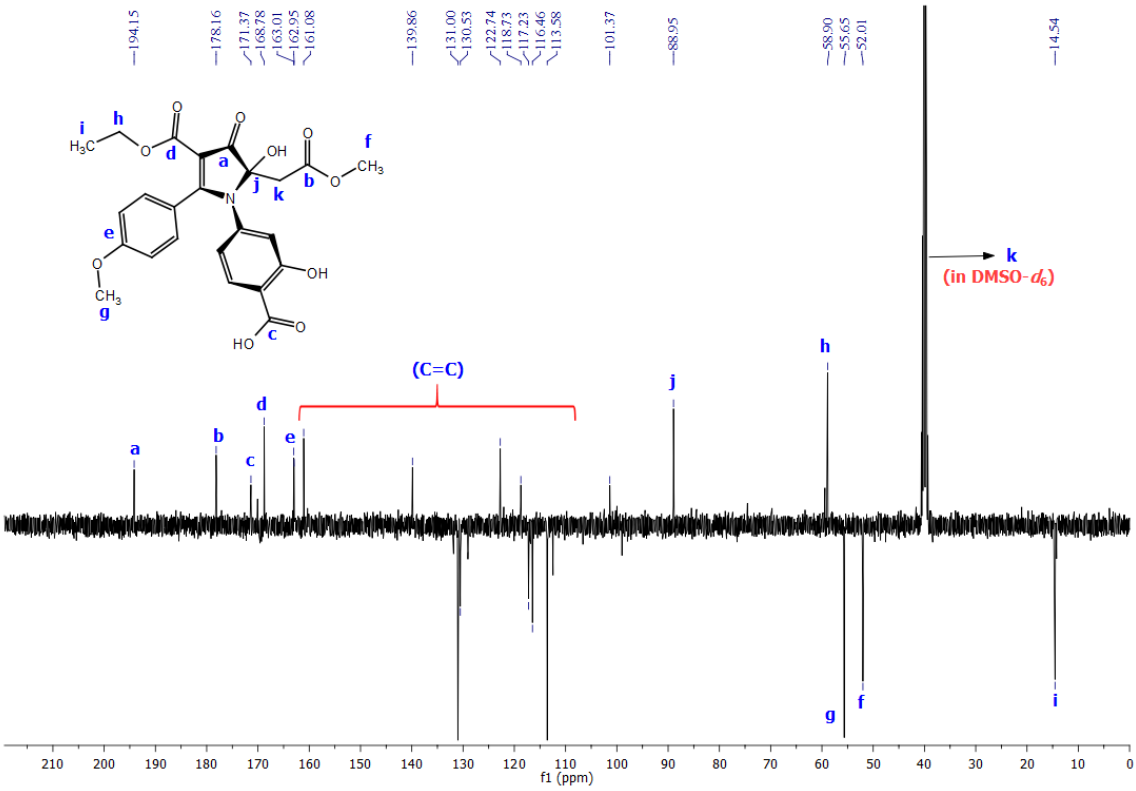

Figure S19: ^{13}C NMR spectra of **7e**