

Supporting Information

Triethylamine: A Potential *N*-Base Surrogate for Pyridine in Knoevenagel Condensation of Aromatic Aldehyde and Malonic Acid

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1. FTIR spectra of synthesized cinnamic acids

1.1 FTIR of compound 3a

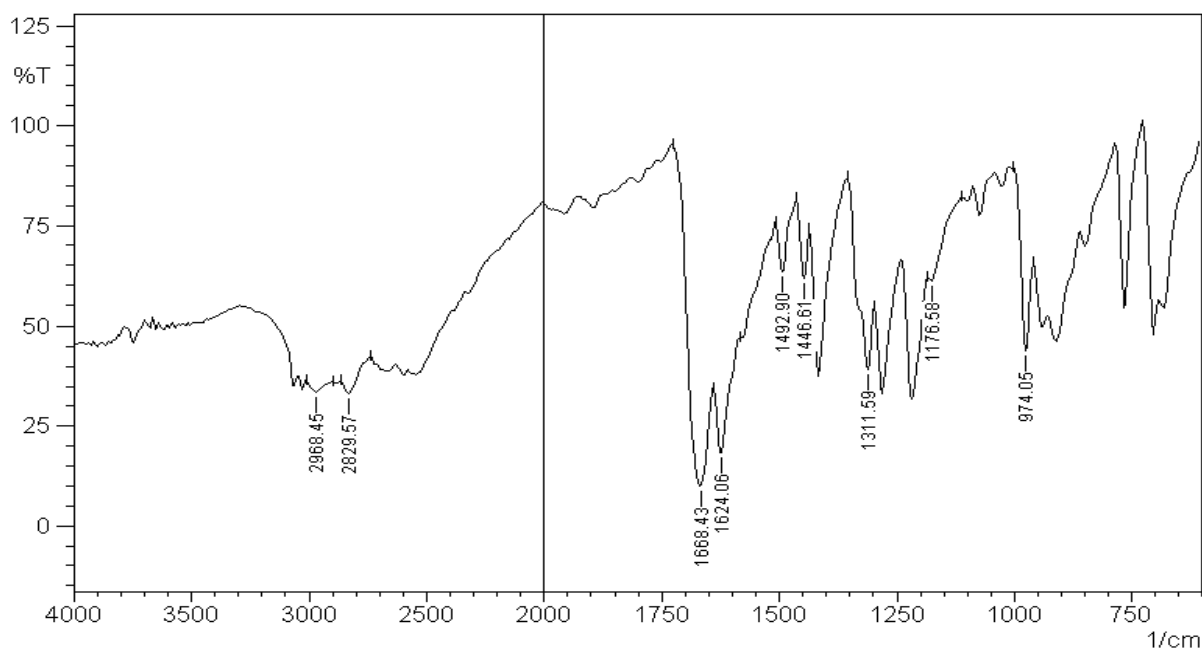


Figure S1. ATR-FTIR of compound 3a

1.2 FITR of compound 3b

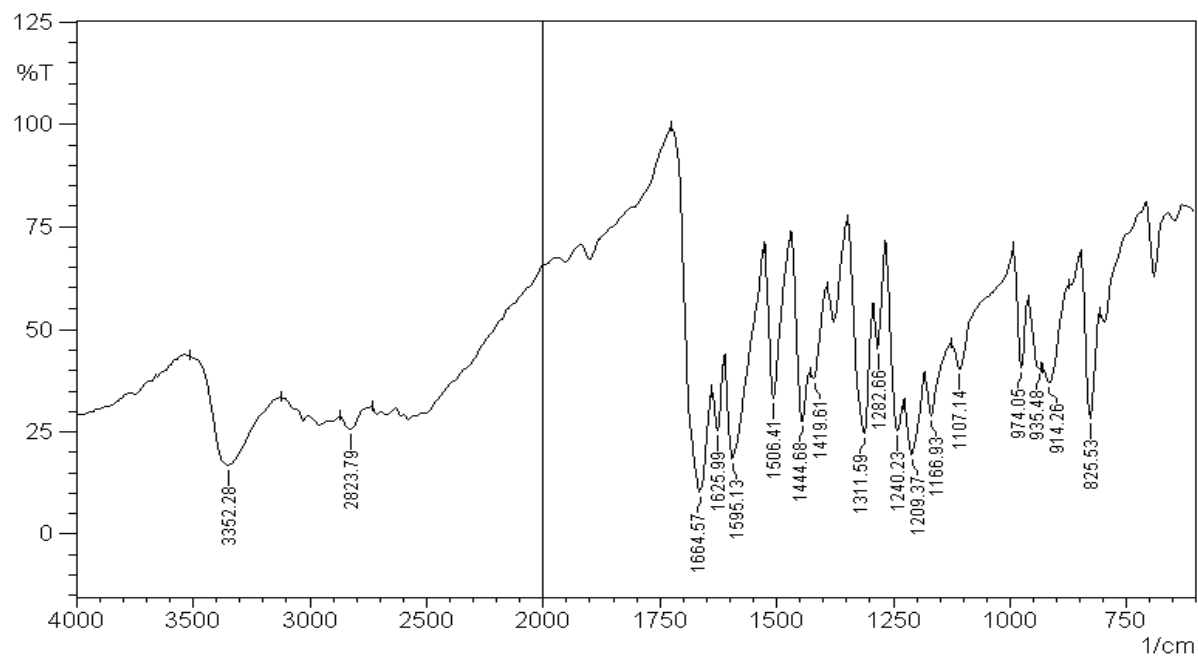


Figure S2. ATR-FTIR of compound 3b

1.3 FITR of compound 3c

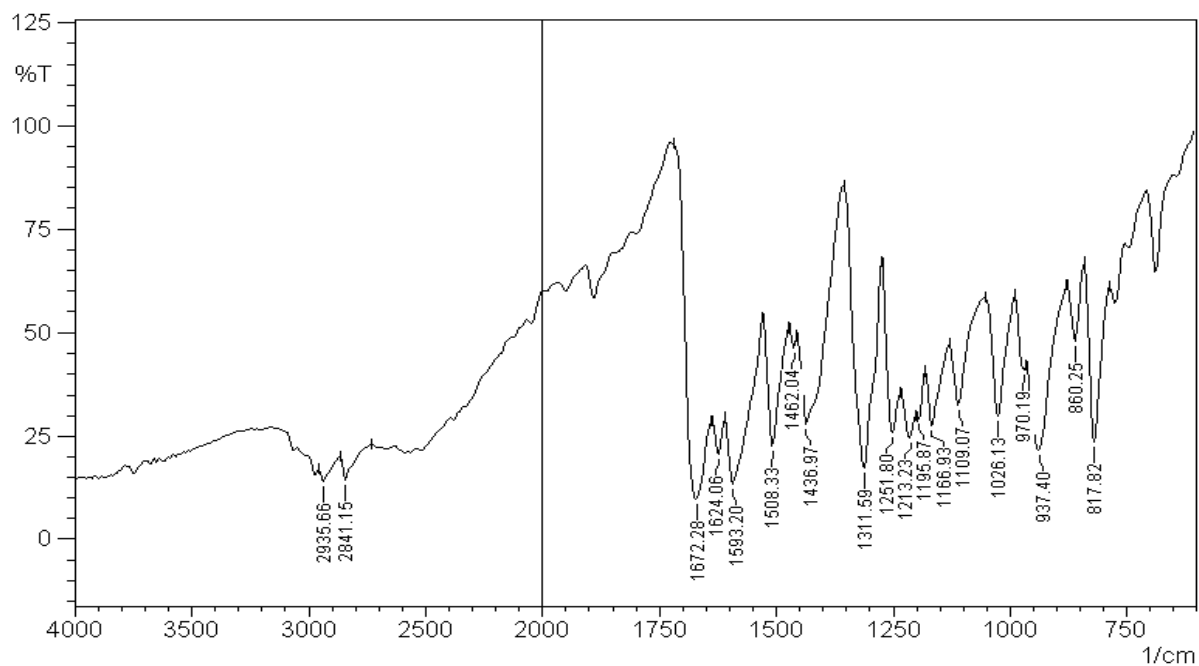


Figure S3. ATR-FTIR of compound 3c

1.4 FITR of compound 3d

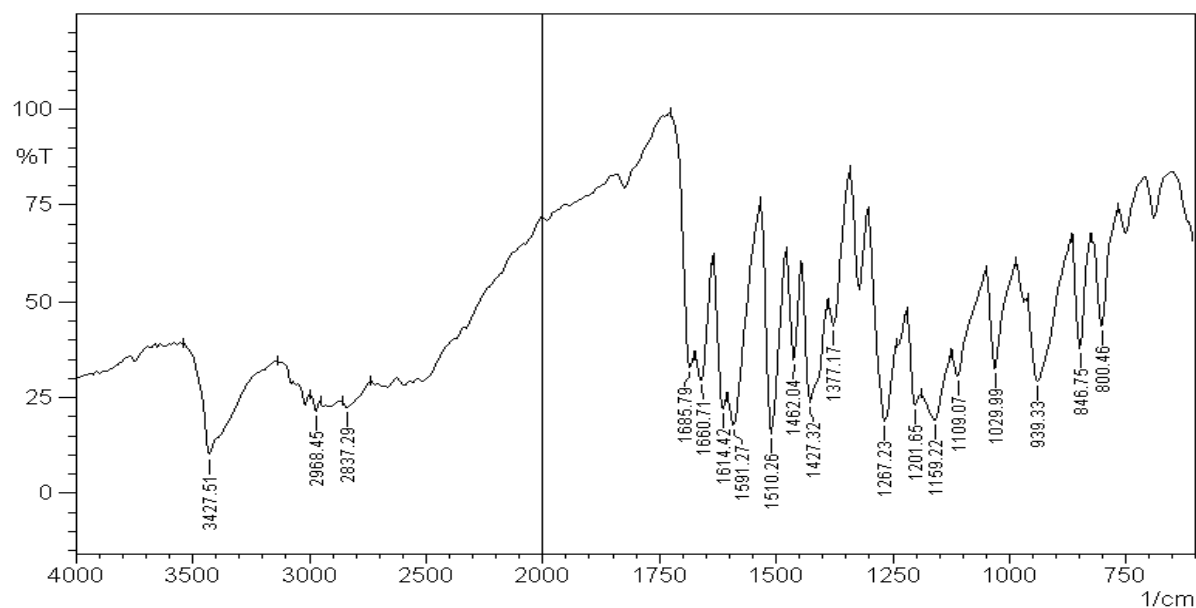


Figure S4. ATR-FTIR of compound 3d

1.5 FITR of compound 3e

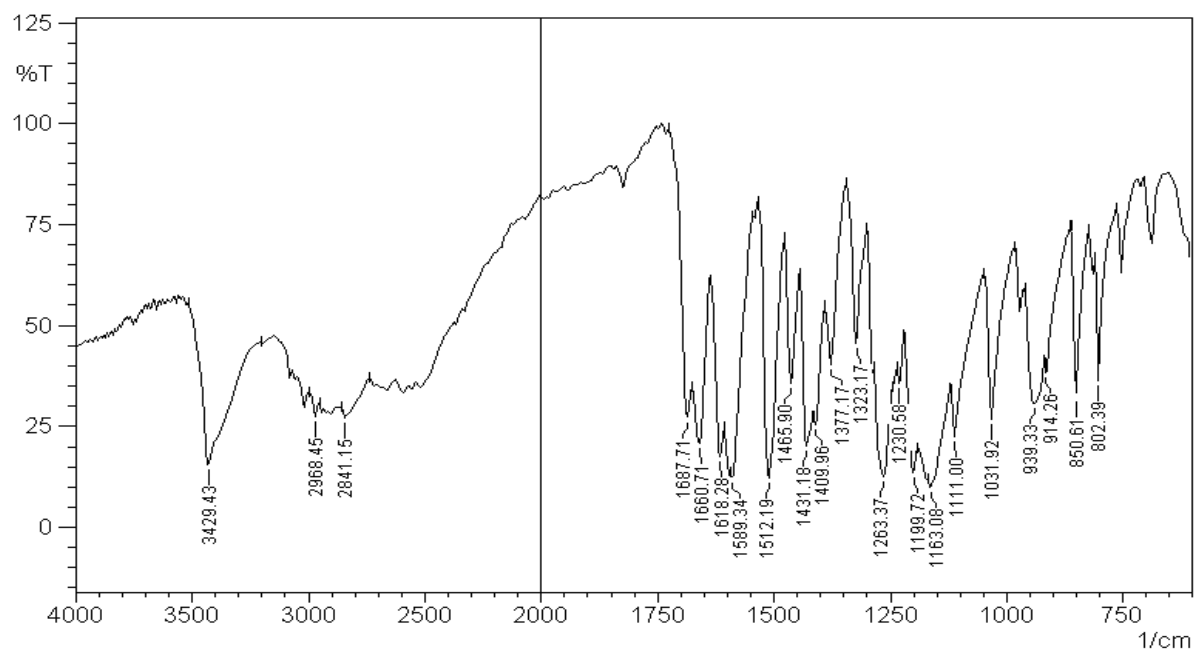


Figure S5. ATR-FTIR of compound 3e

1.6 FITR of compound 3f

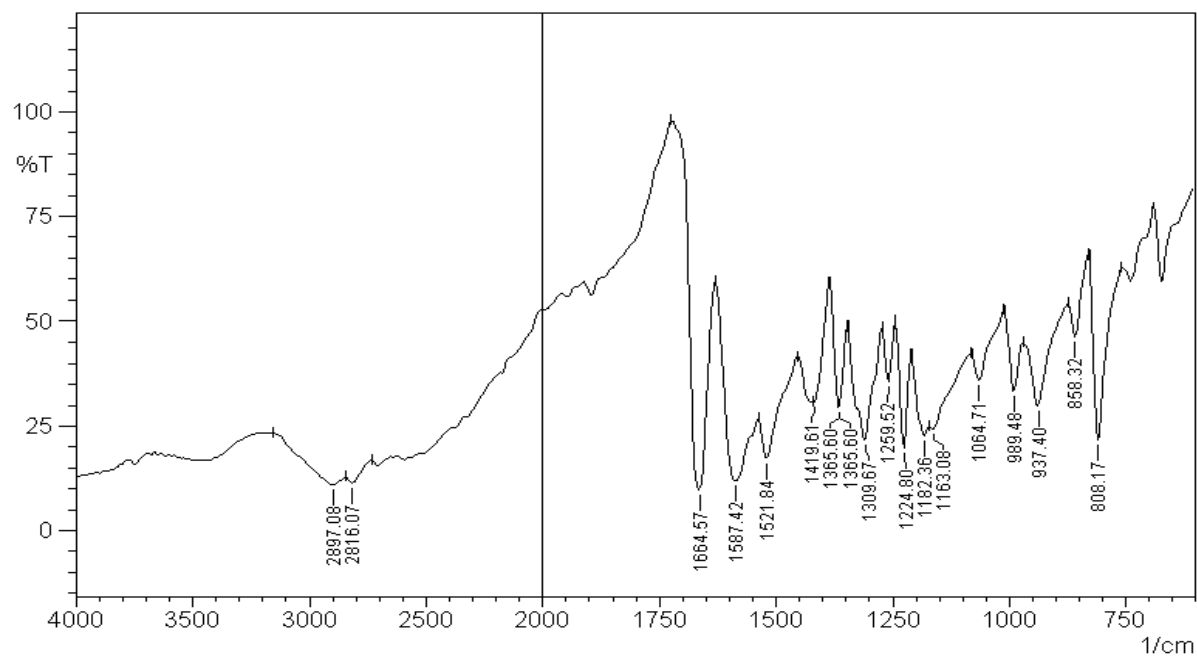


Figure S6. ATR-FTIR of compound 3f

1.7 FITR of compound 3g

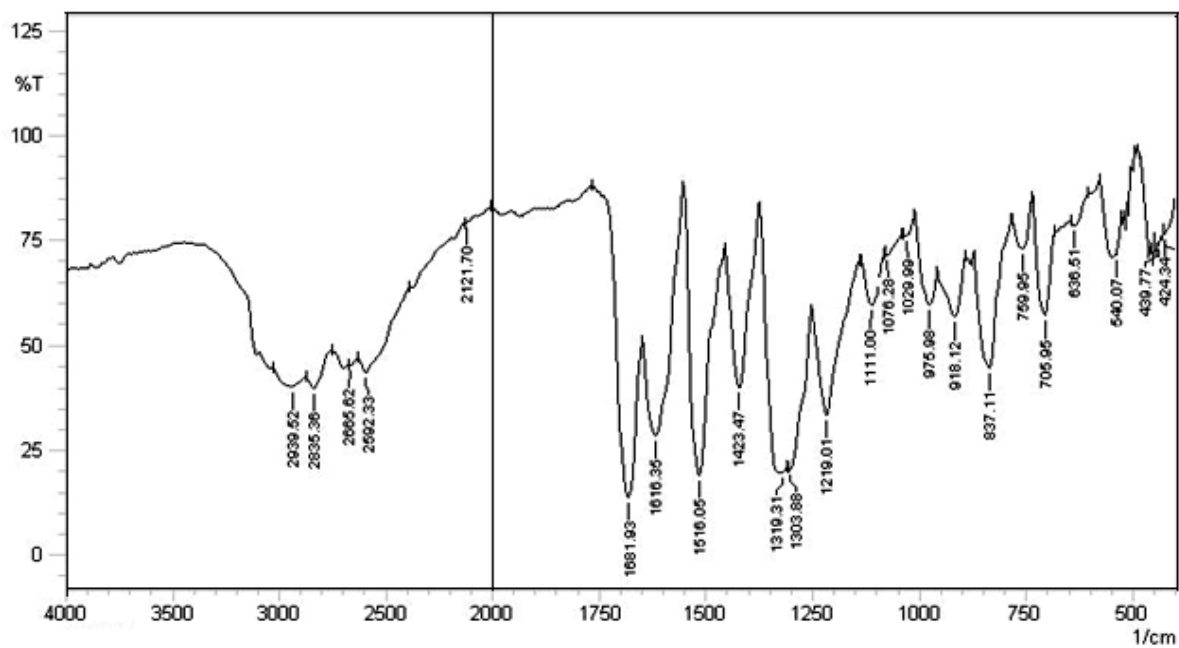


Figure S7. ATR-FTIR of compound 3g

1.8 FTIR of compound 3h

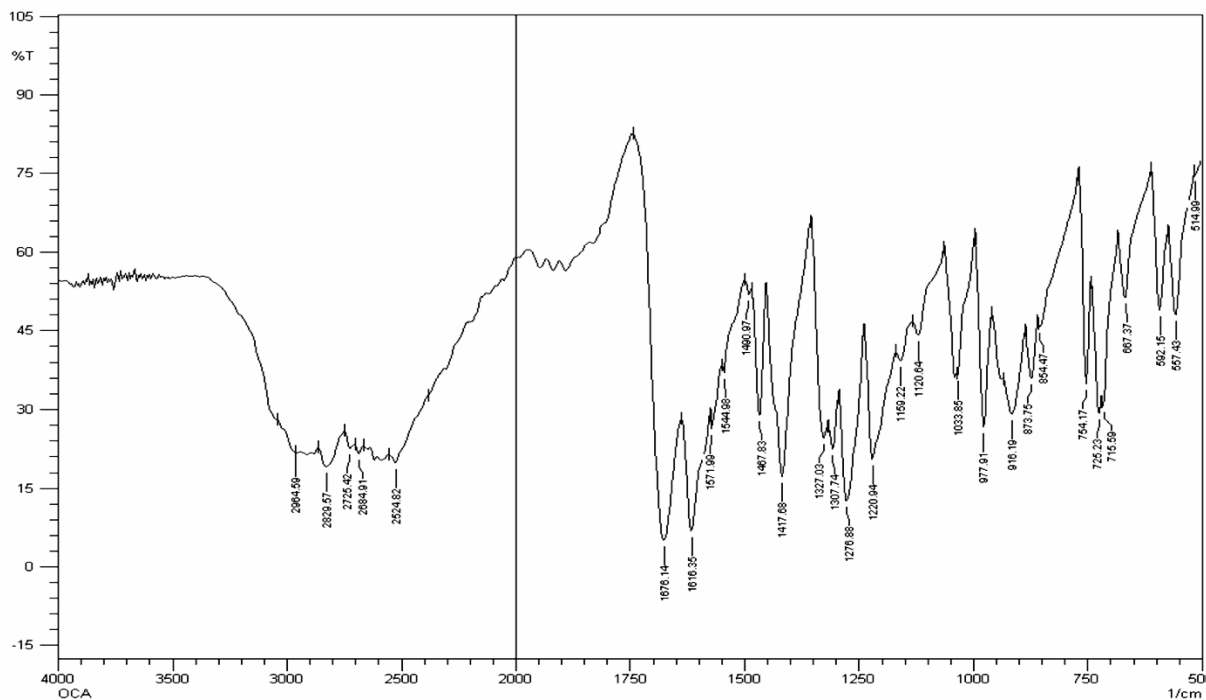


Figure S8. ATR-FTIR of compound 3h

2. LC MS analysis of synthesized compounds

2.1 LC MS of compound 3a

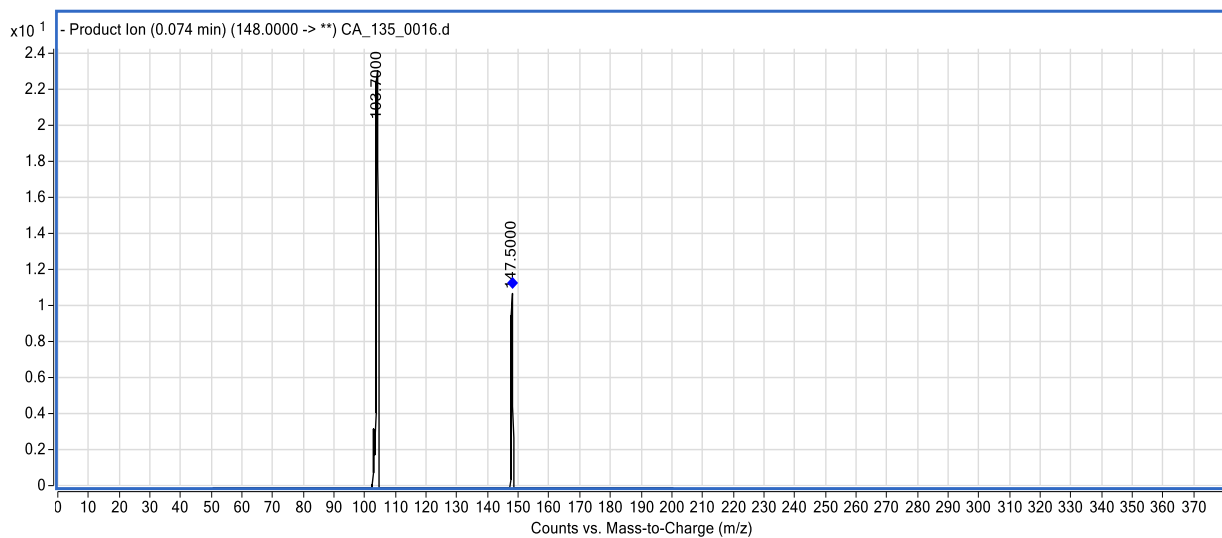


Figure S9. LC MS chromatogram of compound 3a

2.2 LC MS of compound 3b

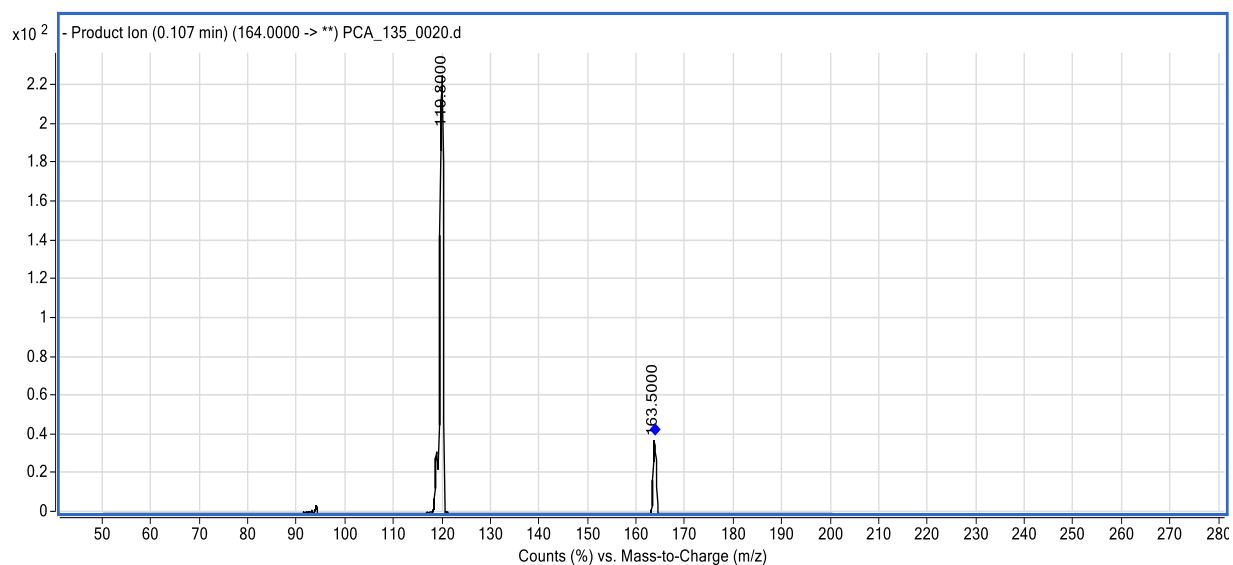


Figure S10. LC MS chromatogram of compound 3b

2.3 FITR of compound 3c

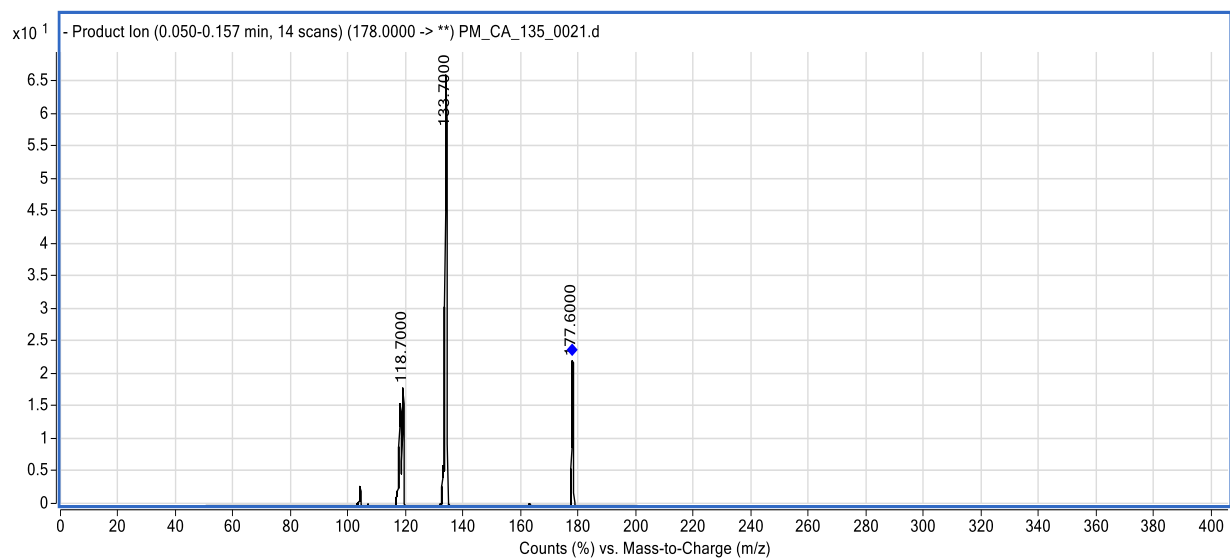


Figure S11. LC MS chromatogram of compound 3c

2.4 FITR of compound 3d

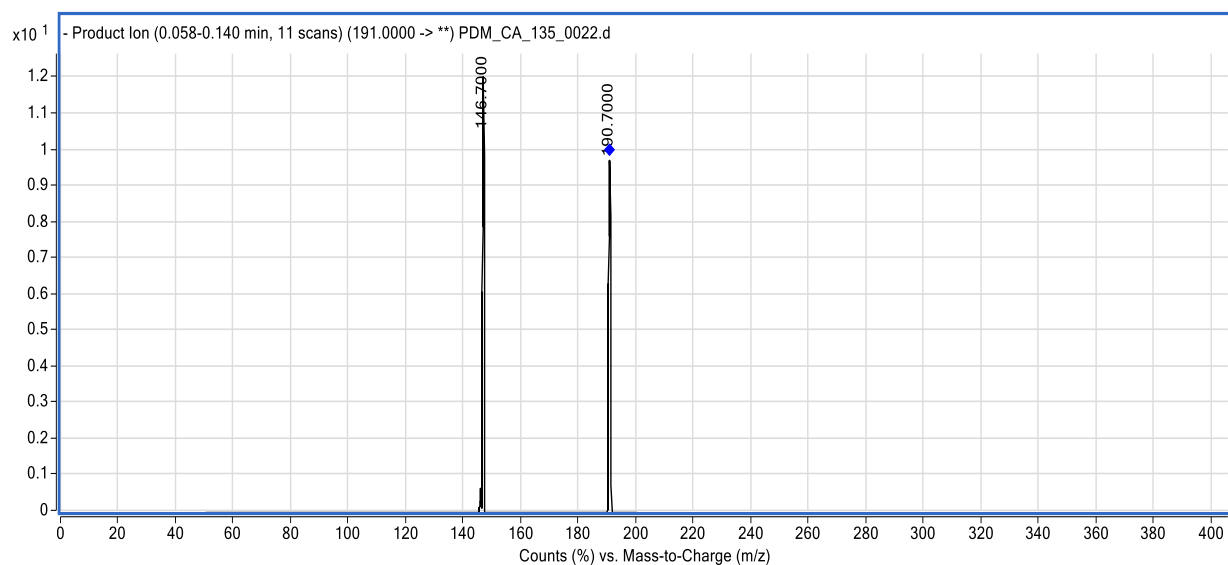


Figure S12. LC MS chromatogram of compound 3d

2.5 LC MS of compound 3e

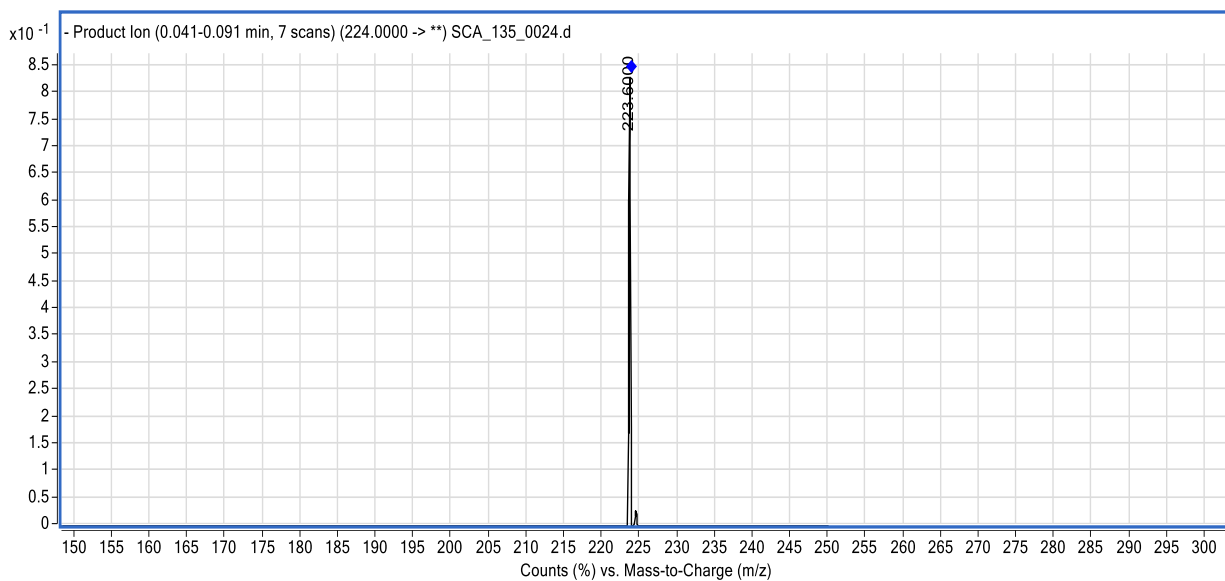


Figure S13. LC MS chromatogram of compound 3e

2.6 LC MS of compound 3f

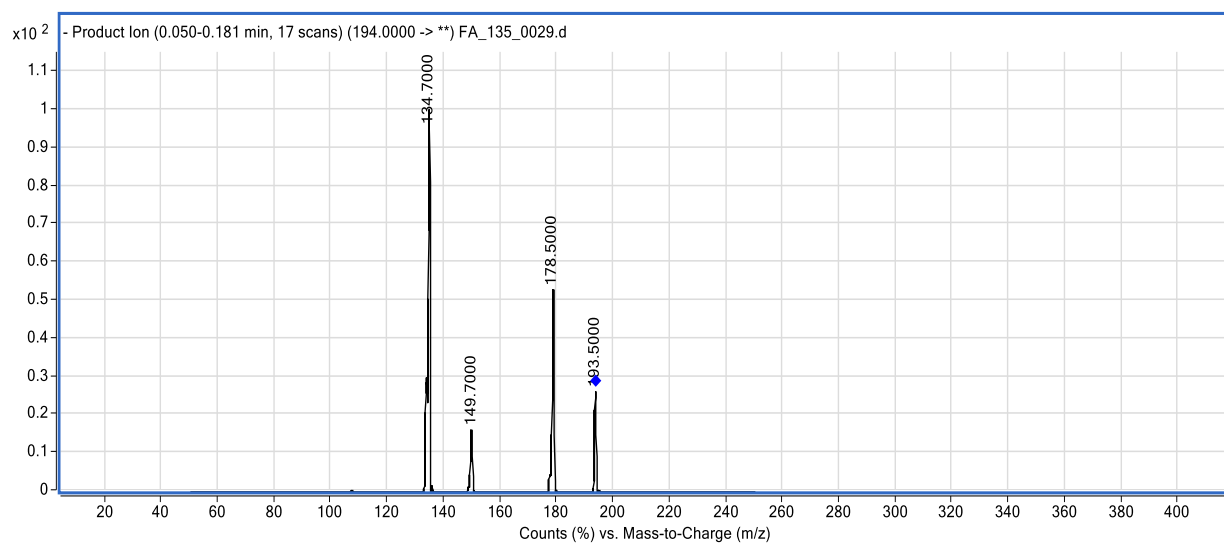


Figure S14. LC MS chromatogram of compound 3f

2.7 LC MS of compound 3g

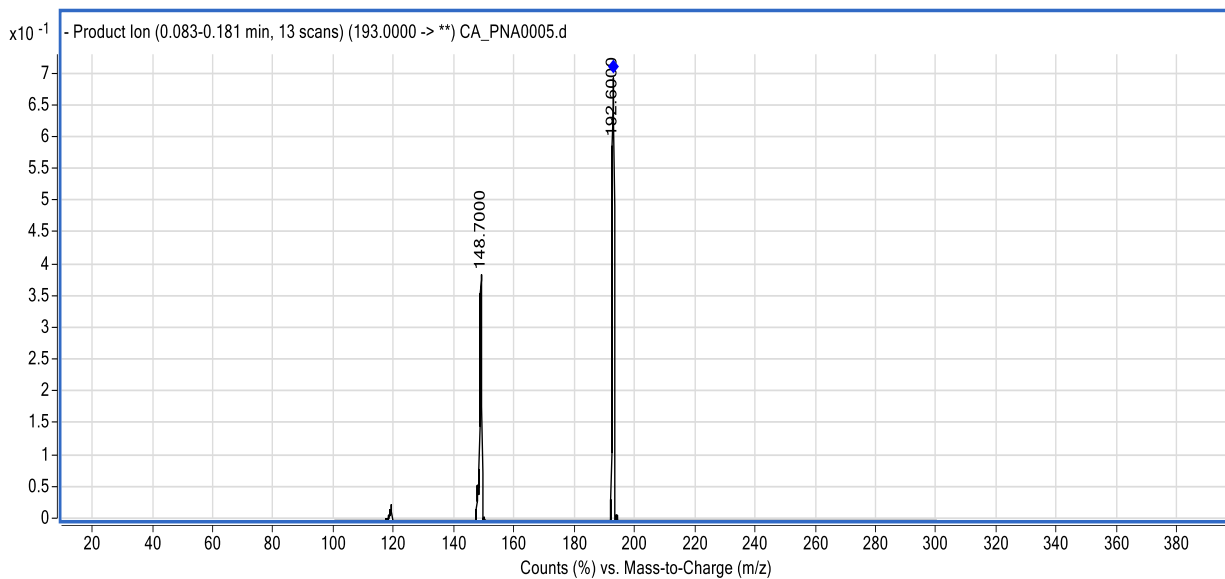


Figure S15. LC MS chromatogram of compound 3g

2.8 LC MS of compound 3h

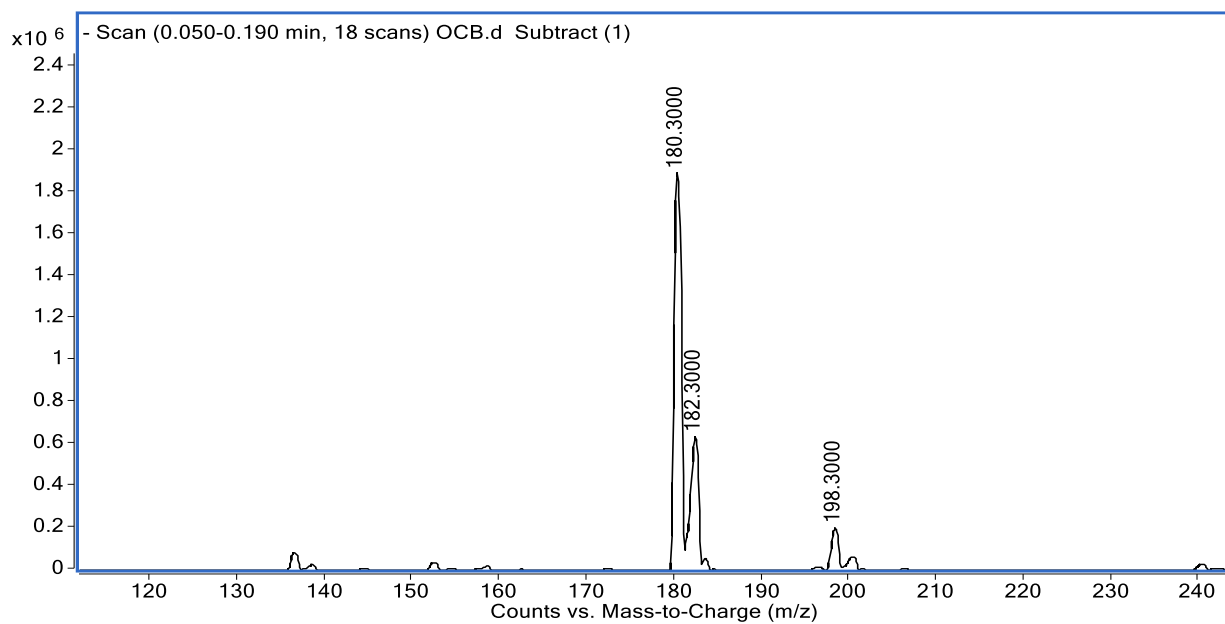


Figure S16. LC MS chromatogram of compound 3h

3. ^1H NMR of synthesized compounds

3.1 ^1H NMR of compound 3a

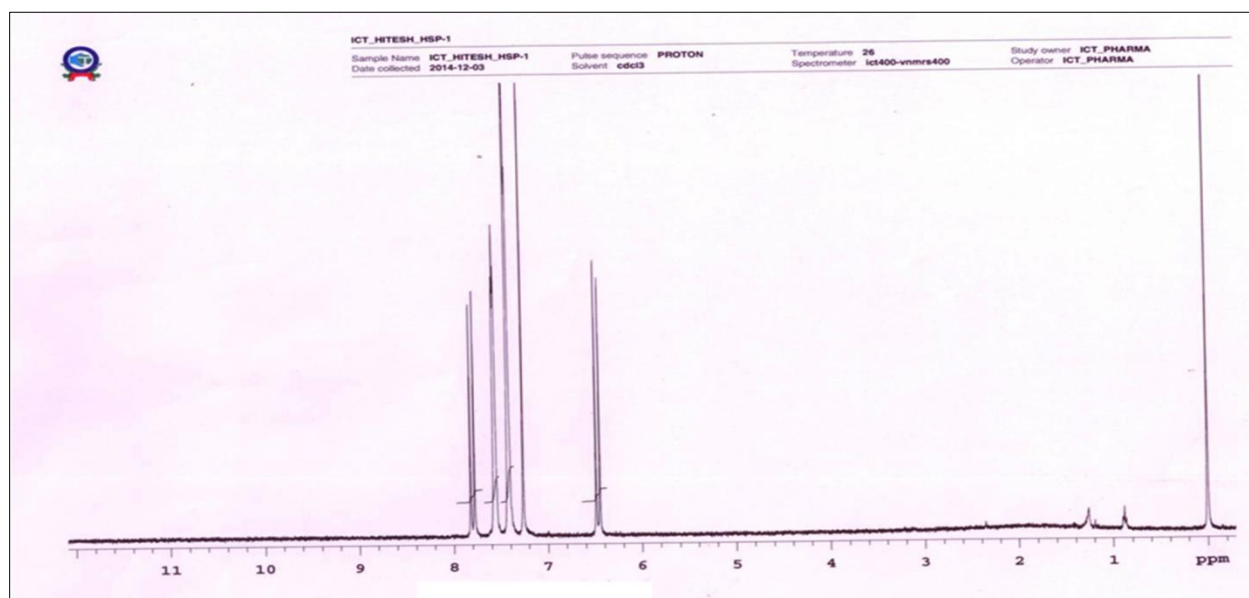


Figure S17. ^1H NMR of compound 3a

3.2 ^1H NMR of compound 3b

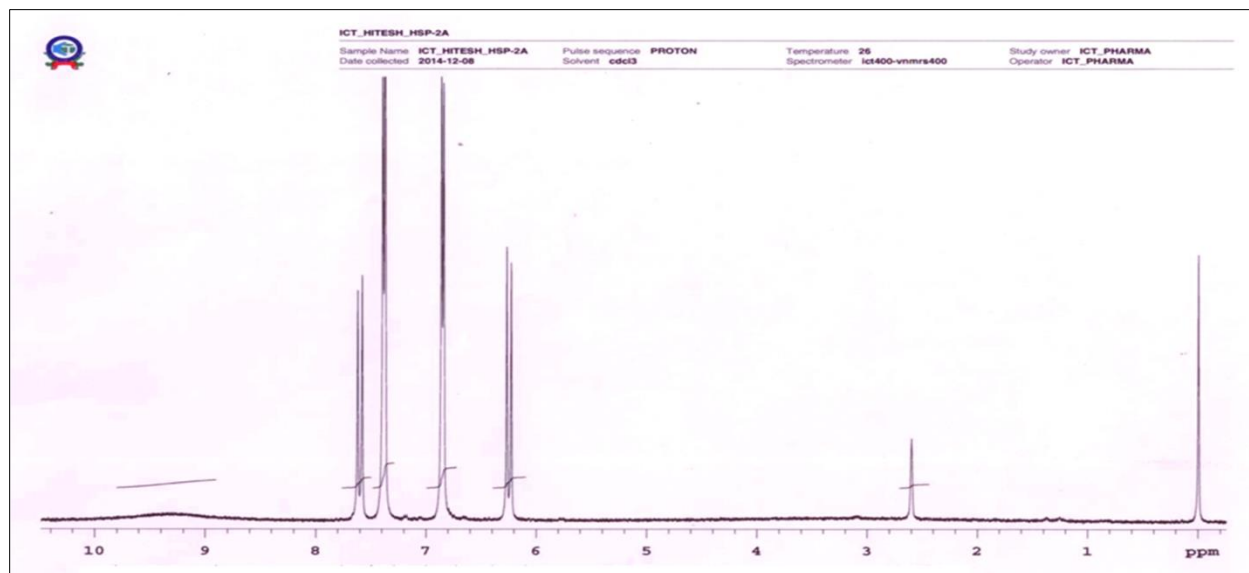


Figure S18. ^1H NMR of compound 3b

3.3 ^1H NMR of compound 3c

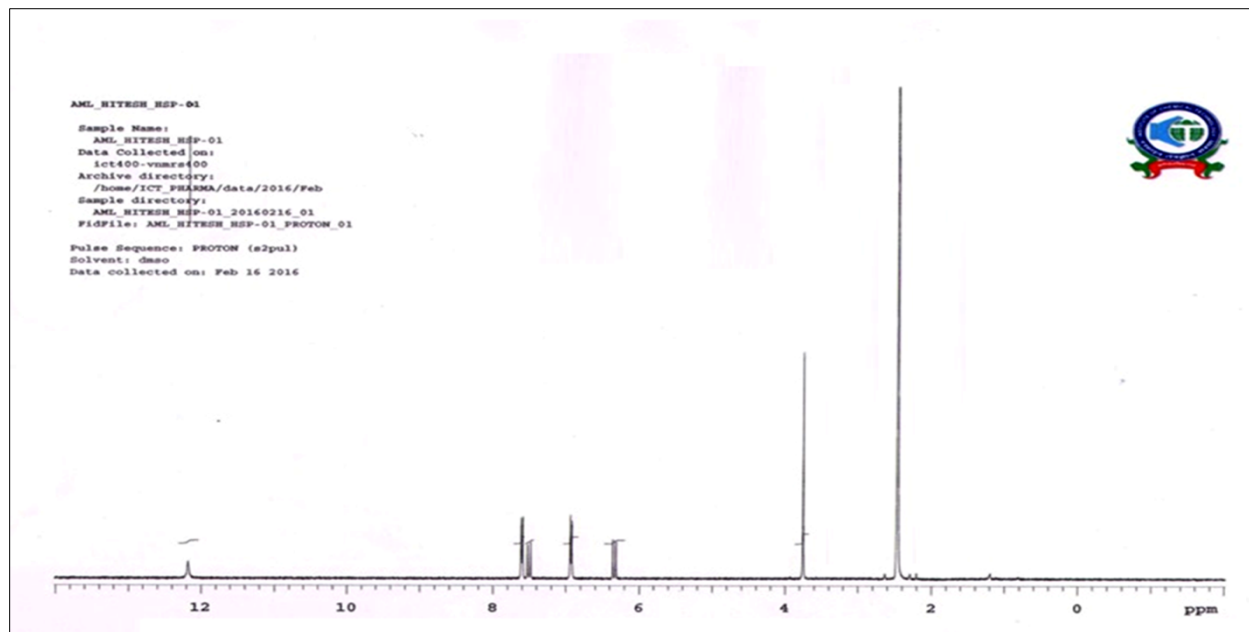


Figure S19. ^1H NMR of compound 3c

3.4 ^1H NMR of compound 3d

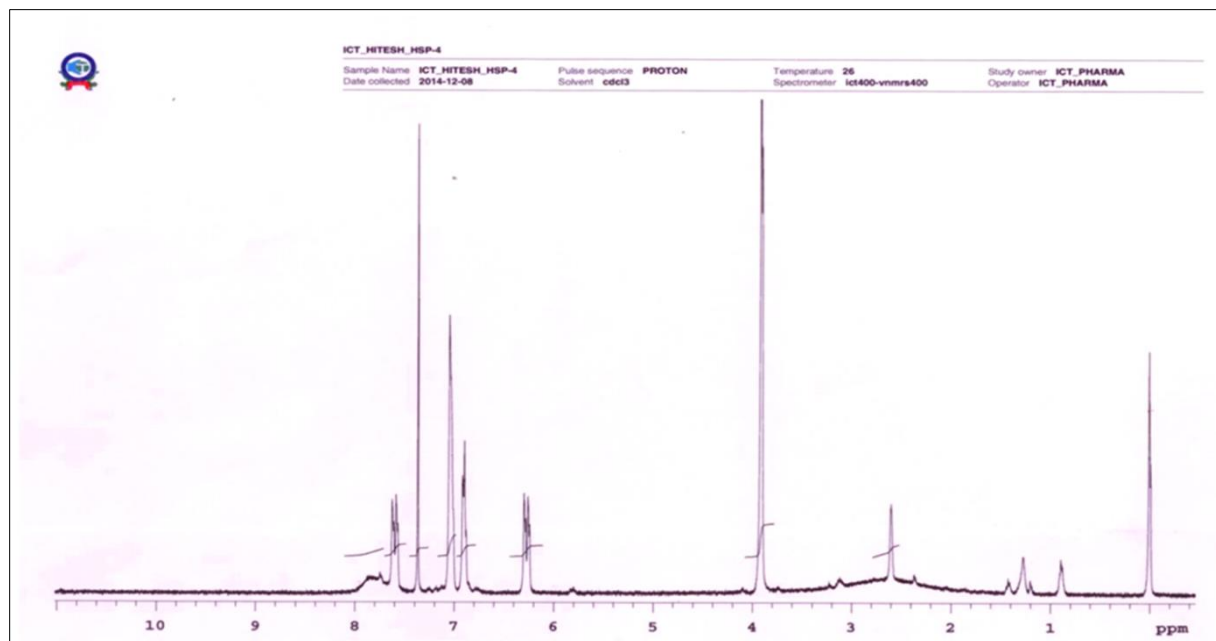


Figure S20. ^1H NMR of compound 3d

3.5 ^1H NMR of compound 3e

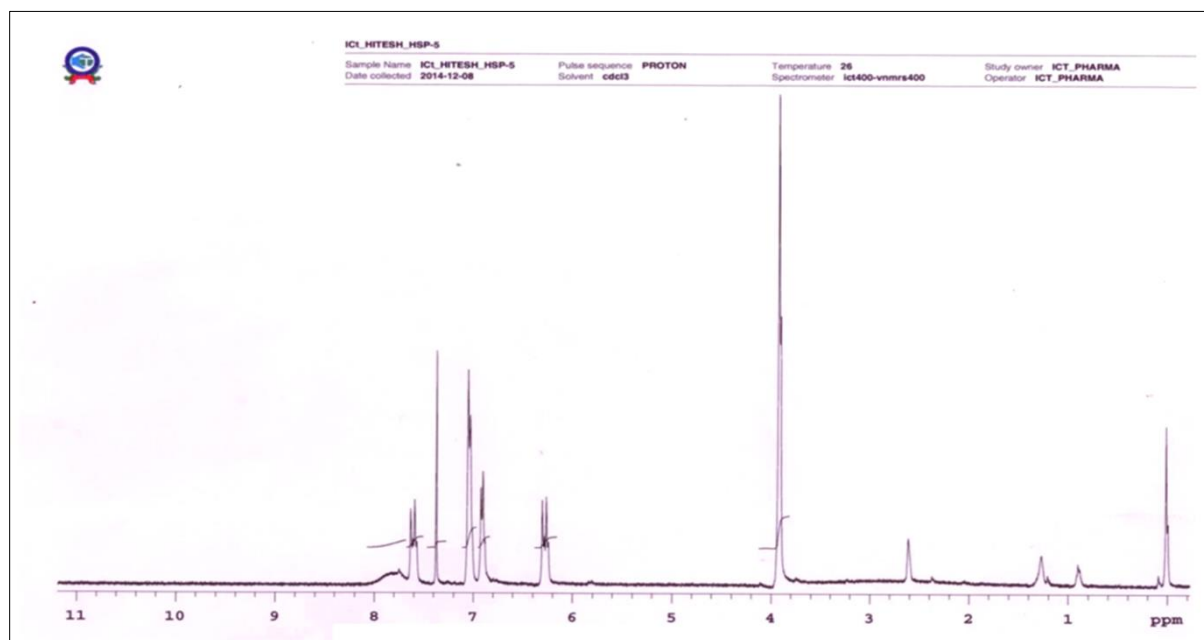


Figure S21. ^1H NMR of compound 3e

3.6 ^1H NMR of compound 3f

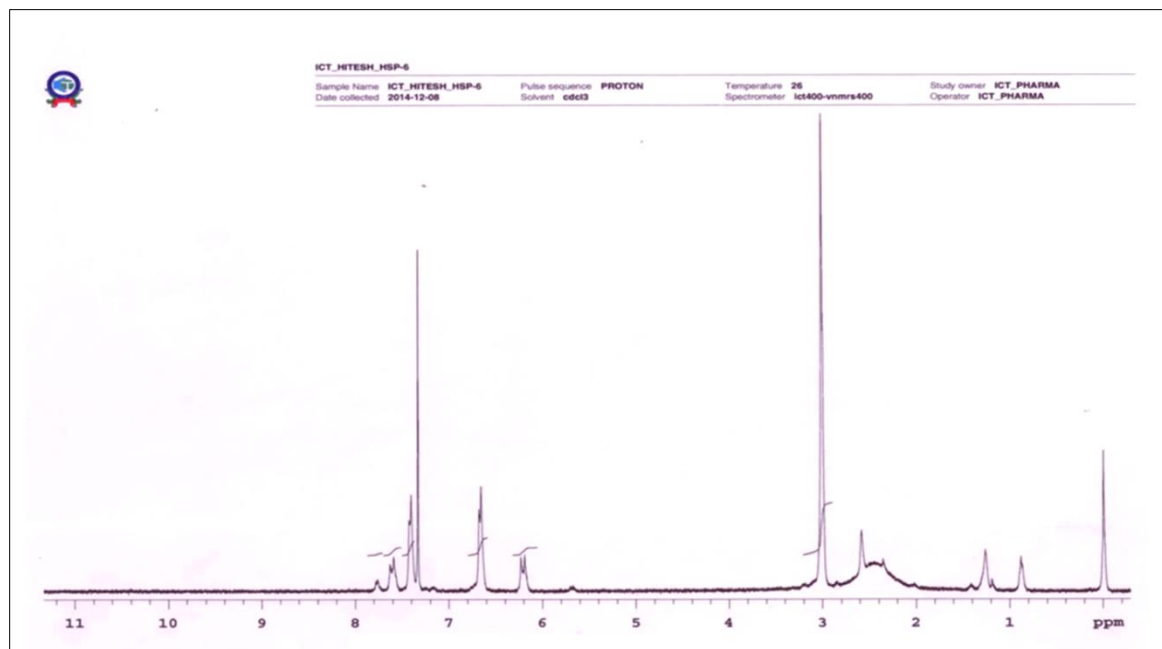


Figure S22. ^1H NMR of compound 3f

3.7 ^1H NMR of compound 3g

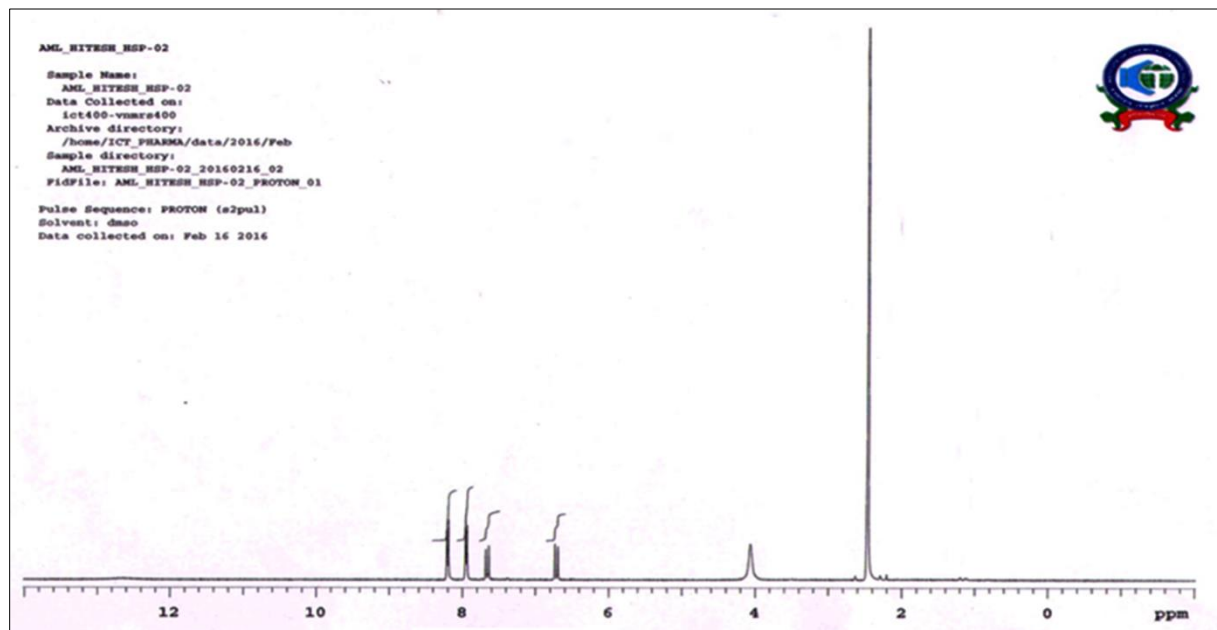


Figure S23. ^1H NMR of compound 3g

3.8 ¹HNMR of compound 3h

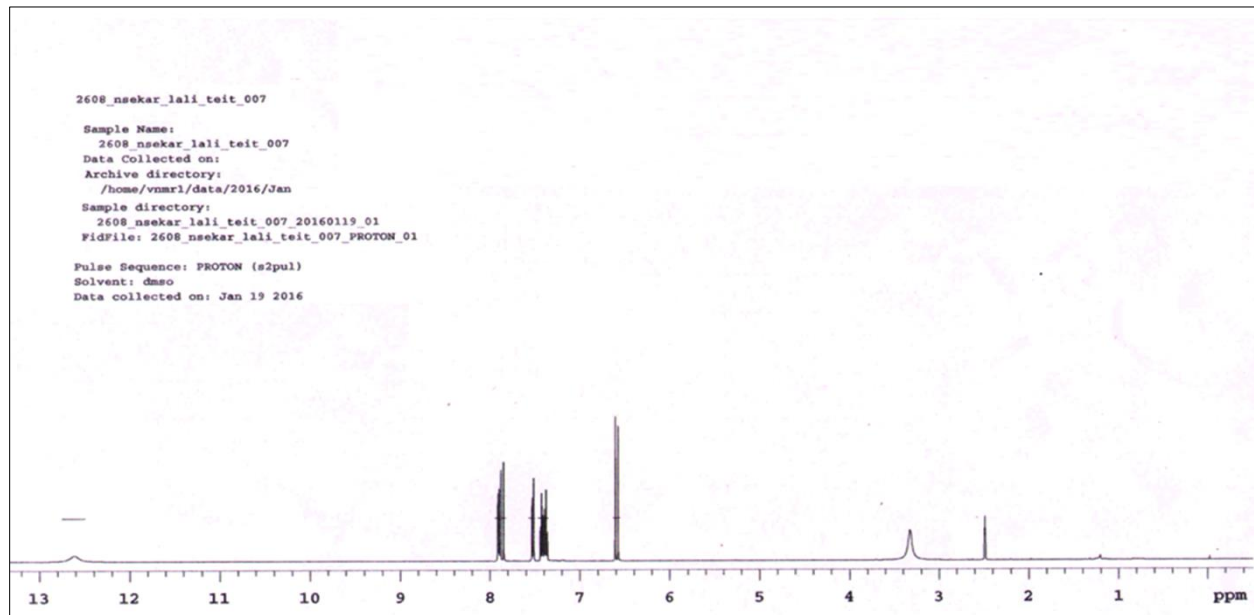


Figure S24. ¹HNMR of compound 3h

4. HPLC analysis of synthesized compounds

4.1 HPLC chromatogram of compound 3a

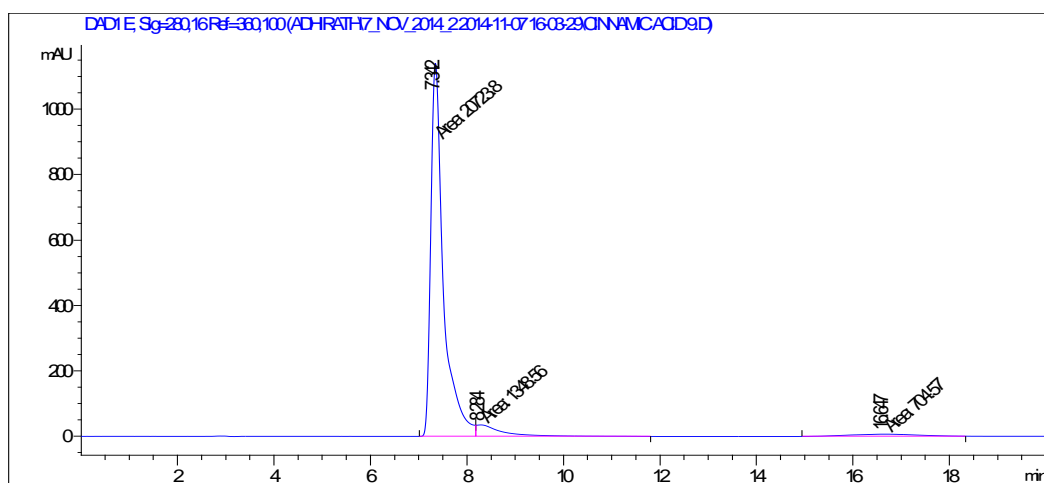


Fig S25. HPLC chromatogram of compound 3a

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	7.342	22072.3	1140.9	0.3224	96.907	0.499
2	16.647	704.6	6.9	1.6988	3.093	0.994

4.2 HPLC chromatogram of compound 3b

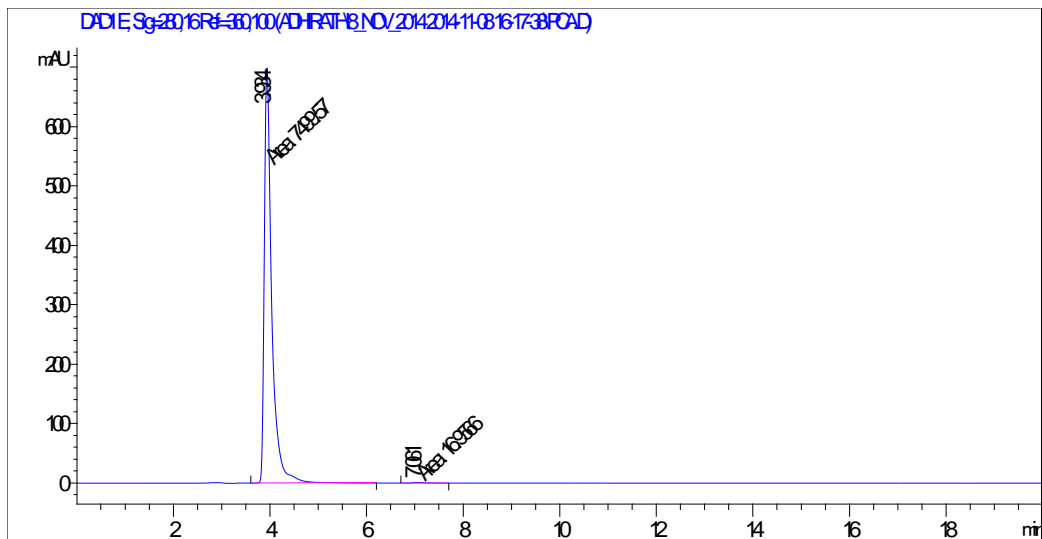


Fig S26. HPLC chromatogram of compound 3b

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	3.934	7499.6	699.3	0.1787	99.774	0.516
2	7.061	17	1	0.2727	0.226	0.716

4.3 HPLC chromatogram of compound 3c

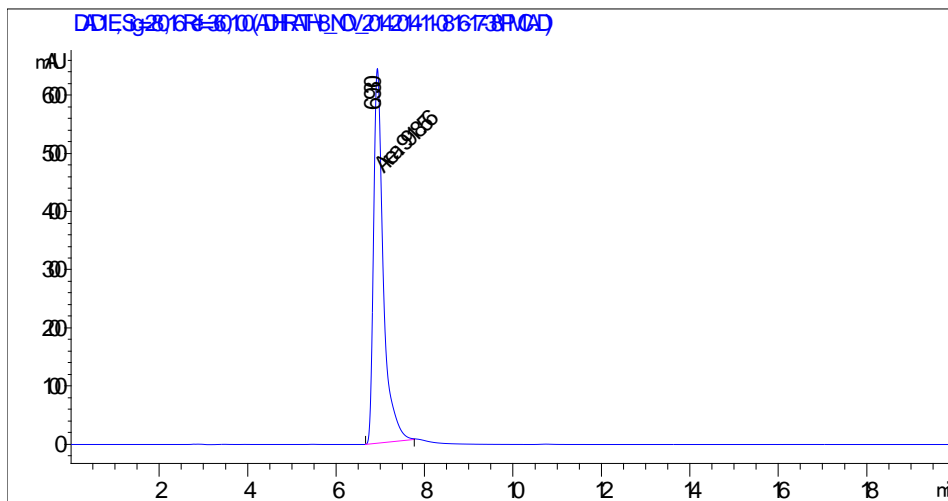


Fig S27. HPLC chromatogram of compound 3c

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	6.93	9918.6	645	0.2563	100	0.608

4.4 HPLC chromatogram of compound 3d

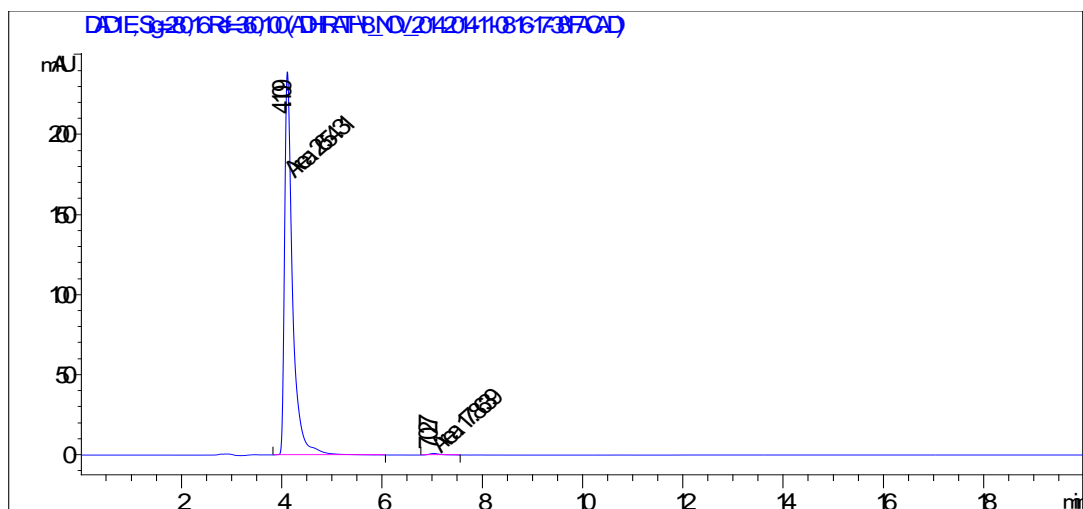


Fig S28. HPLC chromatogram of compound 3d

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	4.109	2654.3	239.5	0.1847	99.331	0.513
2	7.027	17.9	1	0.2904	0.669	0.605

4.5 HPLC chromatogram of compound 3e

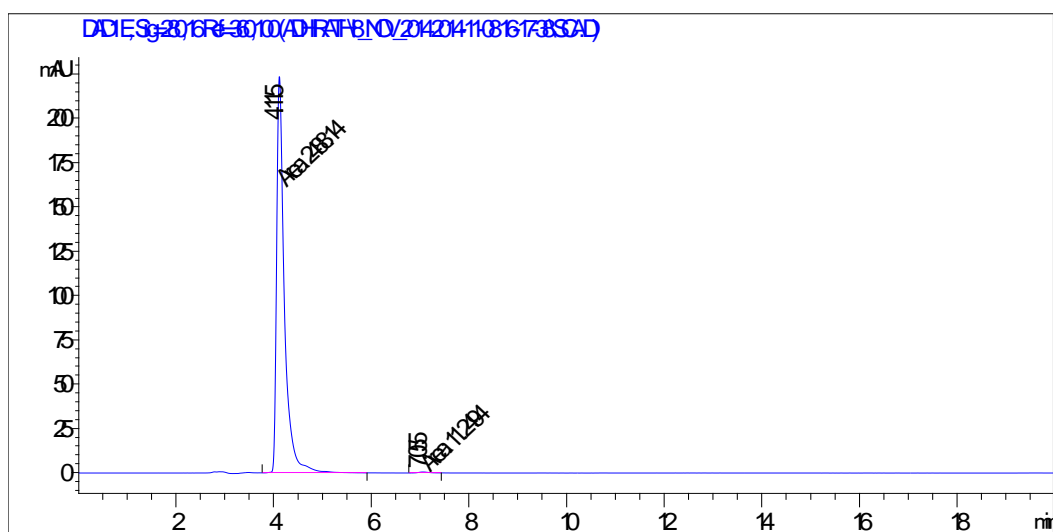


Fig S29. HPLC chromatogram of compound 3e

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	4.115	2488.1	223.9	0.1852	99.55	0.513
2	7.055	11.2	6.30E-01	0.2976	0.45	0.785

4.6 HPLC chromatogram of compound 3f

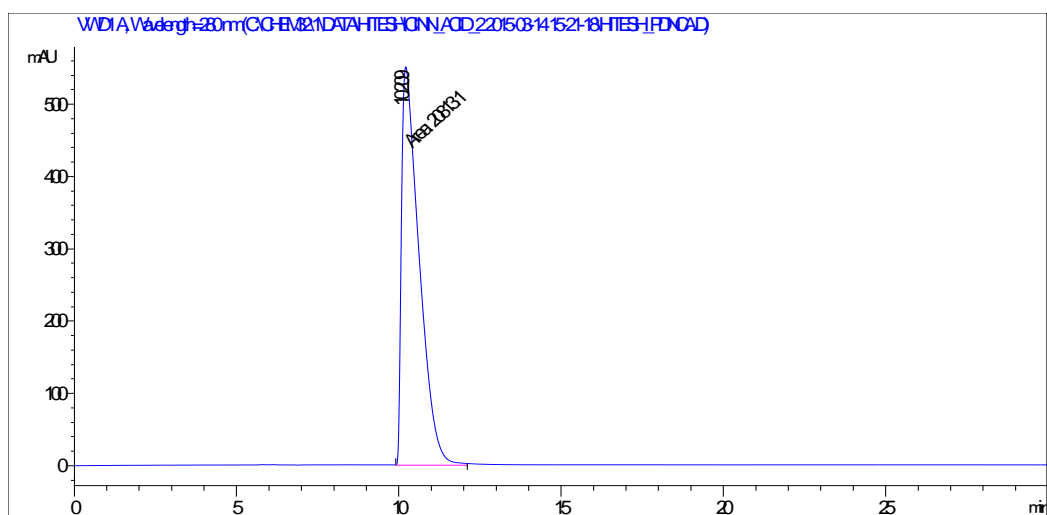


Fig S30. HPLC chromatogram of compound 3f

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	10.209	20813.1	551.3	0.6292	100	0.308

4.7 HPLC chromatogram of compound 3g

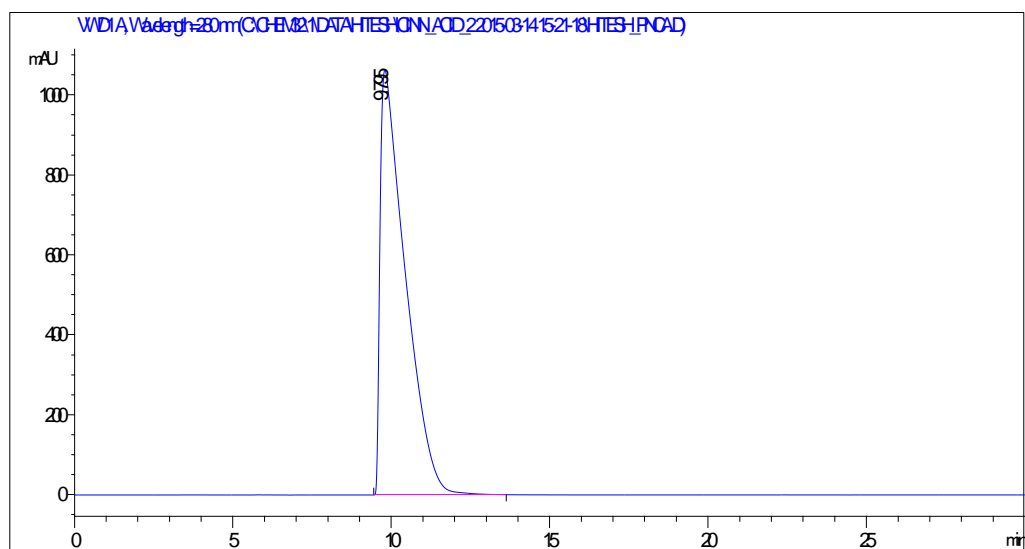


Fig S31. HPLC chromatogram of compound 3g

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	9.795	58699.2	1063.4	0.7867	100	0.215

4.8 HPLC chromatogram of compound 3h

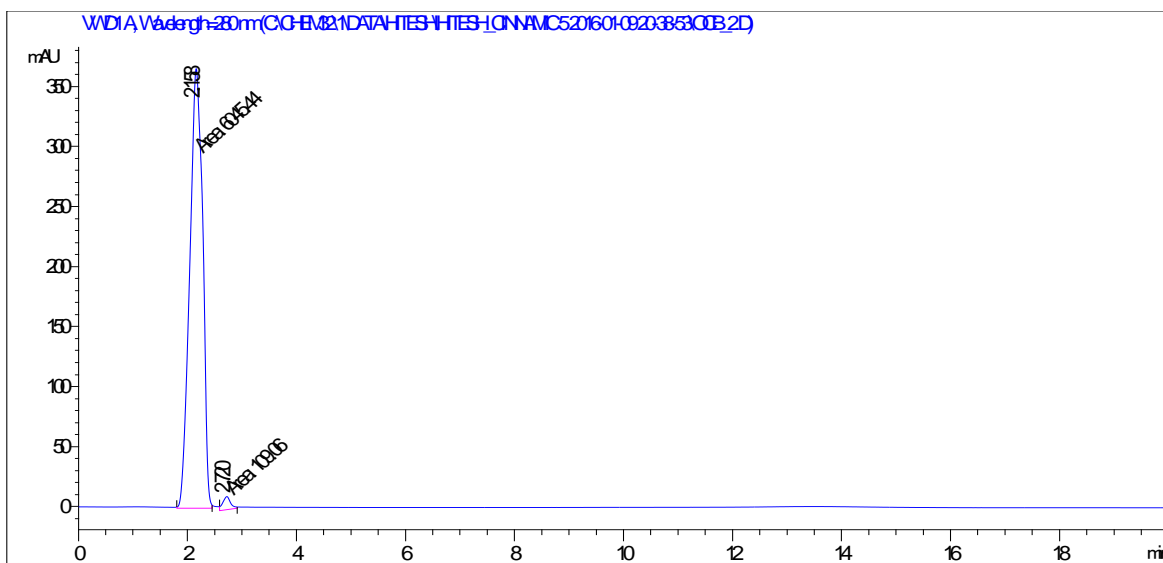


Fig S32. HPLC chromatogram of compound 3h

Sr.No	Time	Area	Height	Width	Area%	Symmetry
1	2.158	6045.4	366.5	0.275	98.228	0.993
2	2.72	109.1	11	0.1654	1.772	1.048